

# MOTOR AGE

A Chilton Class Journal Publication  
Published Weekly October 6, 1927

## STUTZ

wins

### 5 Great Victories in Two Weeks!

on Speedway, Mountain-Course and Highway

**ATLANTIC CITY STOCK CAR RACE\***

September 5th  
First, Second and Third Prizes  
Winning Speed 96.30 M. P. H.  
Establishing New A.A.A. Records

**PIKE'S PEAK STOCK CAR HILL-CLIMB\***

September 5th  
Won by a Standard Stutz Sedan  
with Weymann Body

**PIKE'S PEAK SPECIAL HILL-CLIMB**

September 5th  
Won by a Stutz Special Roadster

**CHARLOTTE, N. C., STOCK CAR RACE\***

September 20th  
First, Second and Third Prizes  
Winning Speed 94.24 M. P. H.  
(Including stops for Tire Changes.)

**MEXICAN NATIONAL CHAMPIONSHIP**

84-Mile Road Race, September 19th  
Won by a Standard 4-Passenger Speedster  
Average Speed, 66 M. P. H.  
Defeating 33 competing cars  
(Course included 30 miles over mountain  
range, with extreme altitude of 11,000 feet.)

**The Safety Stutz has won every contest entered!**

These proofs of phenomenal performance are to the automobile what the added factor of safety is in the construction of elevators for the carrying of passengers. They answer every question about safety or performance.

*A. E. Markover*, President

\*Cars strictly stock, except for removal of wind-shields, tops, fenders and running-boards, in accordance with A.A.A. ruling.

STUTZ MOTOR CAR CO. of America, Inc., Indianapolis

JAR .522 0-II'27

# To-day the car that *Out-sells* is the car that *Out-performs*



By every test known to the industry, Nelson Bohnalite Pistons have been a material aid in establishing astonishing new records in motor performance.

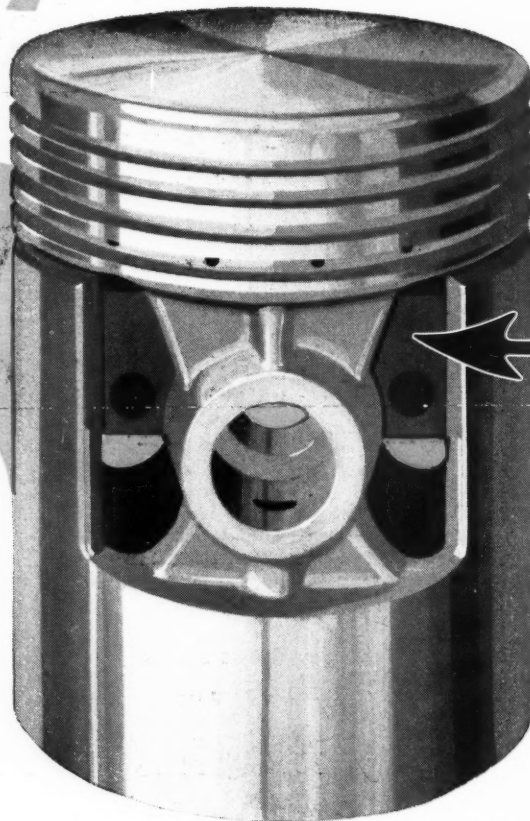
Nelson Bohnalite Pistons are a new development in which are combined both a new light alloy and a new piston design. Their use will give your car the very qualities the public are demanding—greater pick up—greater speed—greater flexibility—a new smoothness and a longer life.

Many of the largest motor car manufacturers have already adopted Nelson Bohnalite Pistons.

Heat treated for uniformity, strength and hardness.

BOHN ALUMINUM & BRASS CORPORATION  
DETROIT MICHIGAN

*Also makers of the famous Bohn Ring True Bearings*



*Special alloy steel struts are cast in, to control expansion and maintain satisfactory clearances under all engine operating conditions.*

# NELSON BOHNALITE PISTONS

The light  
alloy piston  
with a steel  
back-bone

AH  
Tech



# 20,000,000 People *in this Country are using* **FAN BELTS!**

—and an increasingly large percentage of them are driving the new high-speed motors, which put a heavy load on the cooling system.

That is why thousands of dealers are making handsome profits with Farran-oid—it grips the pulley and does its work as the automobile manufacturer wants it done.

It won't stretch—its life is long—it is heat-, oil- and water-proof. It *stays sold*—and helps sell other items.

The Farran-oid catalog describes the entire line of profit-making, good-will building Farran-oid specialties. Use the coupon—today.

THE FARRAN-OID COMPANY, Akron, Ohio

## **Farran-oid** *Products*

Radiator Hose   ✓   Garage Air Hose   ✓   Car Washing Hose  
Blow Out Patches   ✓   Tire Plasters   ✓   Tube Patches  
Combination Patches   ✓   Tire Flaps   ✓   Ford Floor Mats

THE FARRAN-OID COMPANY  
Akron, Ohio

MA

Please send me the new Farran-oid catalog.

Name .....

Address .....

.....

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PORTABLE ELECTRIC DRILLS, GRINDERS, POLISHERS, ETC.

---



{ U. S.  $\frac{5}{8}$ -inch Drill \$78 }  
400 R.P.M. under full load

THE U. S. MARK on the drill you buy is your assurance of uninterrupted service under long, hard usage—low maintenance cost—and long life. U. S. Drills represent the longest experience in portable electric drill manufacturing and use. Ask your jobber—or write us.

THE UNITED STATES ELECTRICAL TOOL COMPANY

*Oldest Builders of Electric Drills and Grinders in the World*

2497 West Sixth Street

Cincinnati, Ohio, U.S.A.

Export Sales Representatives—WESTINGHOUSE ELECTRIC INTERNATIONAL CO.—150 Broadway, New York City

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# MOTOR AGE

Vol. LII

Reg. U. S. Pat. Off.  
Established 1899

No. 14

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under Act of March 2, 1879

*A Sales Point  
of  
Real Merit!*

## CRANKSHAFT

*by*

### WYMAN-GORDON

*The Crankshaft Makers*  
Worcester, Mass.  
Harvey, Ill.

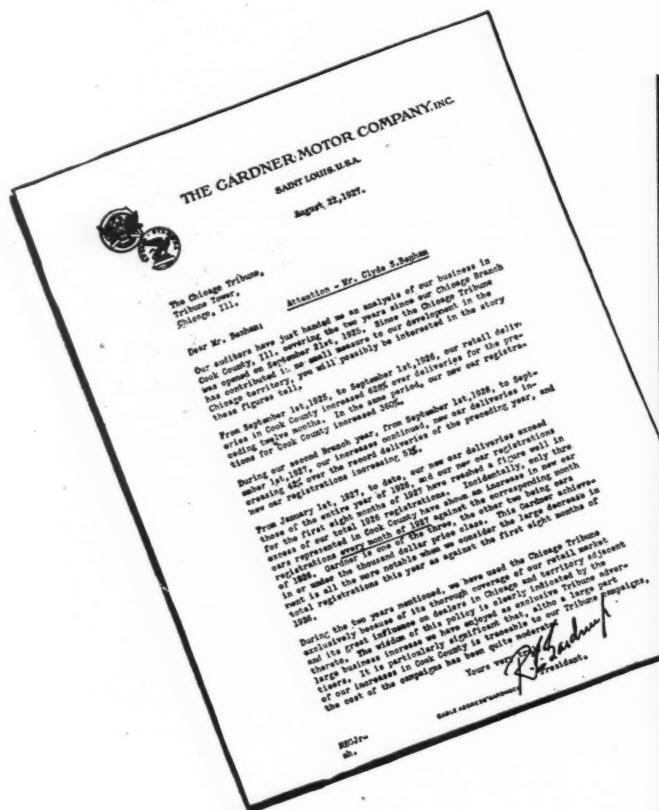
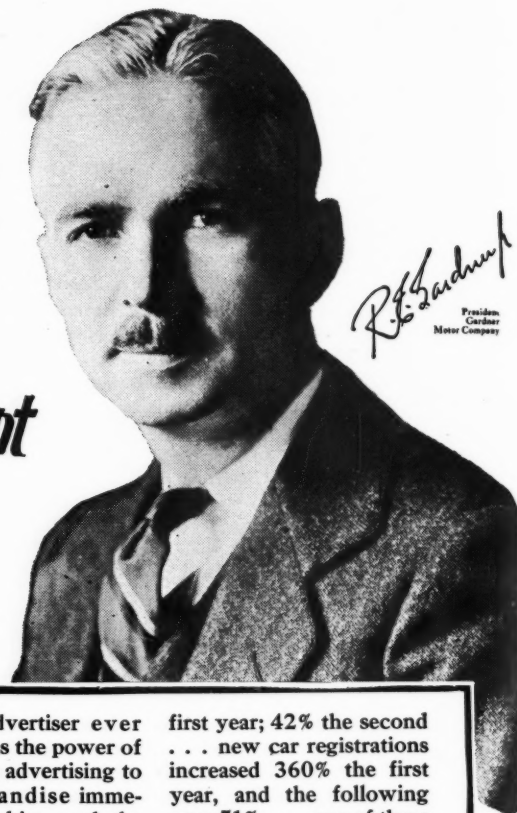




# Gardner Motor Company tackles Chicago market using Tribune exclusively—

*"As a result our sales have increased remarkably"*

says R.E. Gardner, Jr. president



**I**F any advertiser ever questions the power of Tribune advertising to sell merchandise immediately, let him read the letter at the left.

Gardner enters the Chicago market, the most highly competitive field in American business.

He doesn't spend millions using all known forms of advertising media. His advertising appropriation is a modest one—but he uses The Chicago Tribune exclusively! He spends all of his money where it works the greatest good, where it brings the largest return.

FROM THE LETTER: Deliveries increased 628% the

first year; 42% the second . . . new car registrations increased 360% the first year, and the following year 51% . . . one of three cars to show increase every month of 1927 . . . Tribune's thorough coverage and great influence on dealers . . . cost of the campaigns moderate . . . large business increase enjoyed as exclusive Tribune advertisers.

Experience counts. The Gardner Motor Company has had the experience—and knows.

The tendency to concentrate Chicago newspaper advertising in The Tribune is logical and justifiable.

## Chicago Tribune

THE WORLD'S GREATEST NEWSPAPER

Circulation: 781,521 Daily; 1,092,589 Sunday

# New MOUNTAIN-HIGH PROOF of A FAMOUS **STUDEBAKER** **STATEMENT**

**W**HEN a stock Studebaker Commander Roadster won second in the A. A. A. Pikes Peak Climb, Labor Day—only 48 seconds behind a car costing three times The Commander's price—

—when The Commander took first and second places in the Atlantic City 75-mile stock car race, Sept. 5, walking away from five other sixes—it publicly proved

*The Studebaker Commander, now  
\$1495 to \$1625, will out-speed and out-  
climb any car costing less than \$2000!*

Studebaker Commander models are outselling the combined totals of all other cars in the world of equal rated horsepower. Studebaker dealers also have the famous President model for luxury buyers and The Dictator line as a medium-priced leader. These three are in addition to the low-priced, high-quality Erskine Six, now as low as \$895. No wonder Studebaker dealers are happy—and prosperous.

This valuable Studebaker-Erskine Six franchise may be available in your territory! Write or wire today for complete and confidential information. Address Department 51, The Studebaker Corporation of America, South Bend, Indiana.

# STUDEBAKER

## ERSKINE SIX



Two franchises in one—offering cars from \$895 to \$2250

—and in Canada, too

## Record-breaking Growth

Motor car merchants in the United States as well as across the Border, will find this chart of Nash sales in Canada of the utmost interest, as it shows that sales in Canada during the contract year ended August 31, 1927, were ten times the business done during the contract year ended August 31, 1922.

In one month alone this year 802 cars were sold in Canada, and in August, 1927, the new series of Nash cars were responsible for an increase of 50.2% over August, 1926.

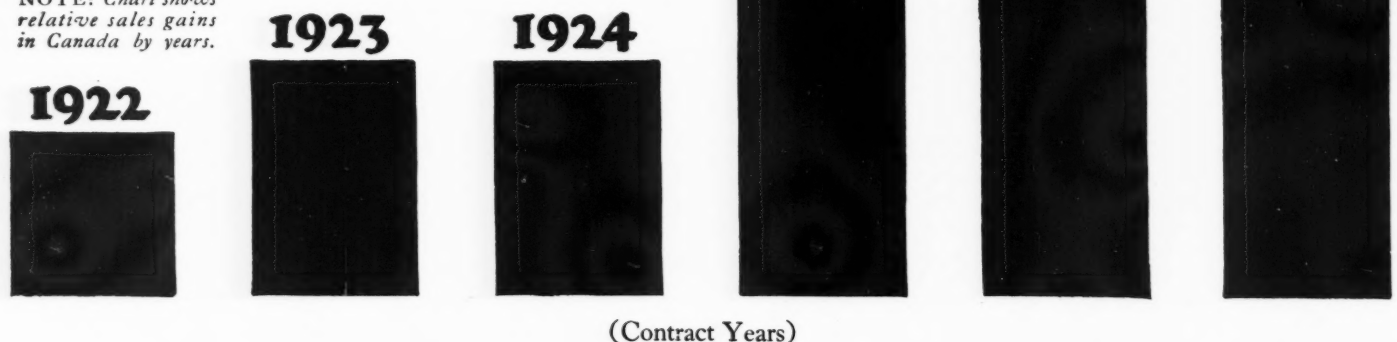
The outstanding quality and value which is pushing Nash business higher and higher in its home country is also achieving full recognition from Canada buyers.

And today the new Nash line of cars is by far the greatest merchandise Nash dealers have ever had to market.

Twenty-four models—all SIXES—all with 7-BEARING motors—priced at the factory from \$865 to \$1990—these cars place a dealer in command of the most highly profitable volume market the industry affords.

Information relative to available territory in the United States and in Canada can be had promptly by wiring or writing the Sales Department, The Nash Motors Company, Kenosha, Wisconsin.

NOTE: Chart shows relative sales gains in Canada by years.

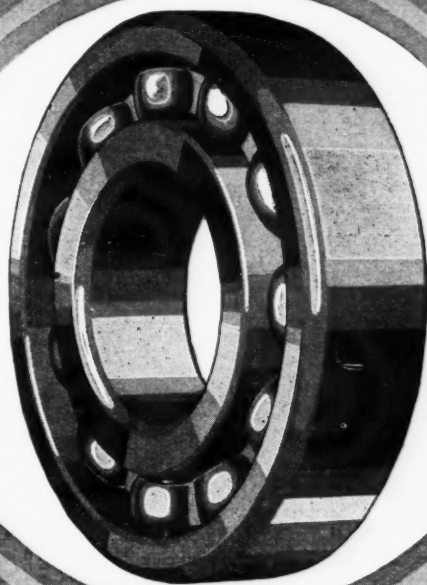


(Contract Years)

# NASH

*Leads the World in Motor Car Value*





## What Price Bearings?

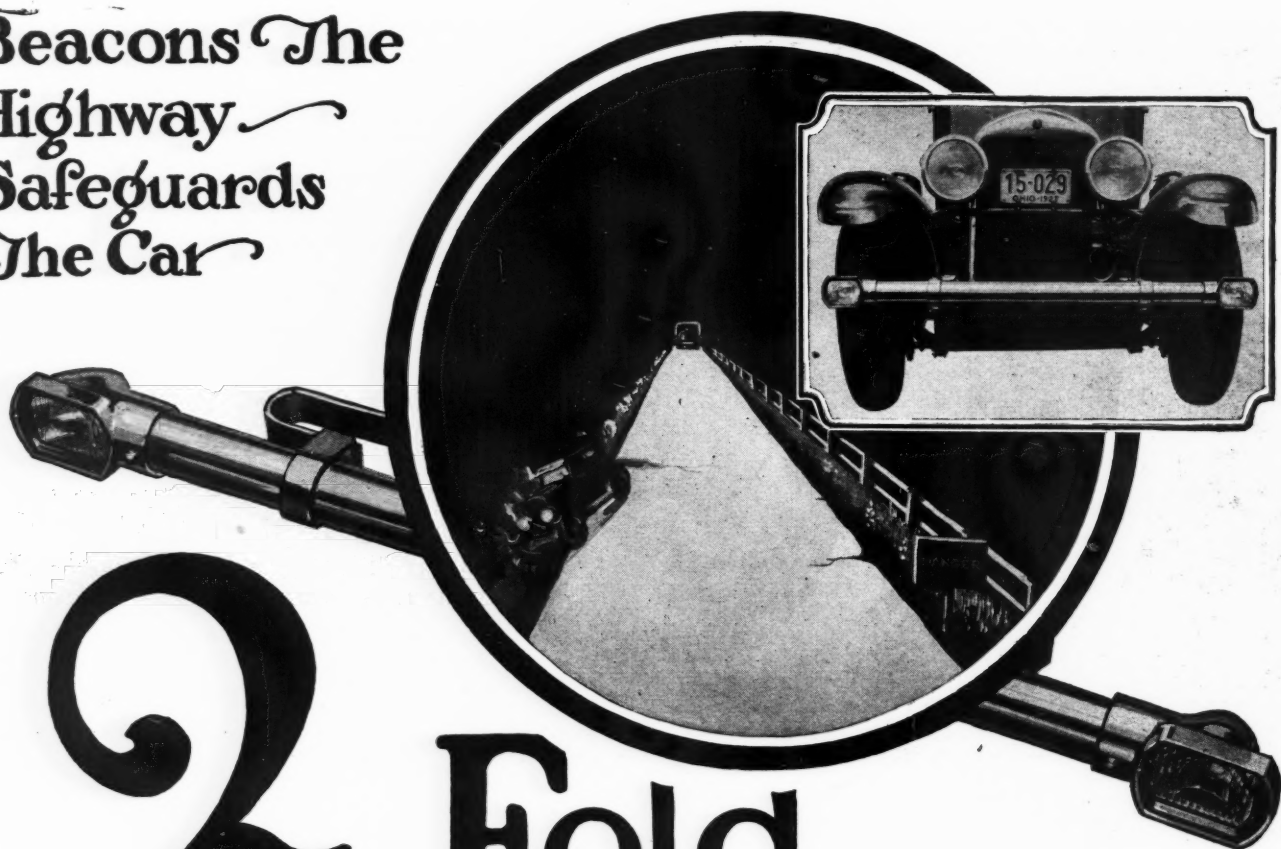
You get what you pay for. This statement would be trite if it were not increasingly apt in these days of close competition.

No saving in price in a bearing can possibly compensate for the better performance, longer, uninterrupted life and maintenance economies which the New Departure Ball Bearing gives any motor car.

THE NEW DEPARTURE MANUFACTURING CO.  
BRISTOL, CONNECTICUT  
Detroit      San Francisco      Chicago

**New Departure**  
*Quality*  
**Ball Bearings**

Beacons The  
Highway—  
Safeguards  
The Car



# 2 Fold Protection!

**N**IGHT driving is no longer dangerous! Dealers everywhere are equipping cars with the famous **BRIGHT BUMPER**—the bulwark of protection and beacon for the highway. This sturdy, seamless steel tube bumper is the very utmost in collision protection, and it is equipped with **TWO POWERFUL SAFETY DRIVING LIGHTS**, inset in either end. These lights, fully protected against breakage, illuminate the road from ditch to ditch for 500 feet ahead of the car. No set of head lamps, no spot light ever provided such pleasurable night driving.

The piercing beam, only 20 inches off the road at any point, goes under fog and mist and shows any road obstruction plainly. There is absolutely no glare to annoy oncoming drivers. Dimming is a thing of the past. You drive with bright lights always, and with the most perfect road illumination you have ever experienced. Set directly ahead of the tires, the **BRIGHT BUMPER DRIVING LIGHTS** assure you plenty of room in passing other cars. Approaching drivers give you a wide berth.

No motoring device has ever received a more enthusiastic reception. **NOW** is the time to cash in **BIG**.

~ **GUARANTEED AGAINST BREAKAGE** ~  
**BUMPER ENDS—LENSES AND REFLECTORS REPLACED FREE IF EVER BROKEN**

*Write for Literature, Prices and your Discounts*

**The Warren Tool & Forge Co., 412 Griswold, Warren, Ohio**

**BRIGHT BUMPER**



# MOTOR AGE

VOLUME LII

Philadelphia, Pa., Oct. 6, 1927

NUMBER 14

## Service Meeting Is Held by Cadillac

400 Managers From All Parts of World Spend Three Days at Plant

### EXECUTIVES SPEAK

DETROIT, Oct. 3—The largest and most important service convention ever held by the Cadillac Motor Car Co. took place September 27, 28 and 29. It was attended by 400 service managers and assistant managers of distributors and dealers from every state; from the Dominion of Canada, and by service representatives of the General Motors Export and the Cadillac companies.

The convention was called by H. M. Stephens, Cadillac general sales manager, and was in charge of Nicholas Dreystadt, general service manager.

The importance attached to the convention is indicated by the fact that the service department is an integral part of the company's sales division, entailing recognition by the company of the fact that satisfactory performance of the car in the hands of the owner is of utmost importance to sales.

During the three-day session, officials and leading executives of the Cadillac company and of the General Motors Corp. met with the men and tours of inspection were made through the Cadillac and LaSalle plants and the General Motors Proving Ground. In addition to the various phases of service problems discussed by Mr. Dreystadt and members of his department, the following executives spoke:

Lawrence P. Fisher, president; Lynn McNaughton, vice-president; Albert U. Widman, works manager; Ernest W. Seaholm, chief engineer, and other members of the engineering staff; H. M. Stephens, general sales manager; W. W. Lewis, assistant general sales manager; F. T. Ellis, superintendent of manufacturing; L. A. Danse, metallurgist; and also Charles F. Kettering, president of General Motors Research Corp.; O. T. Kreusser, manager General Motors Proving Ground, and Benjamin Koether, of the sales division.

### Tire and Rim Men Meet

LANSING, Oct. 5—Credit managers and service representatives of the Tire & Rim Manufacturers' Association held their semi-annual meeting in Lansing Sept. 29-30. Those attending the con-



**Nicholas Dreystadt**

*General Service Manager of Cadillac Motor Car Co., in charge of recent service convention at the plant*

vention were guests of the Motor Wheel Corp. and all sessions were held at Hotel Olds.

Companies represented at the sessions were Motor Wheel Corp.; Firestone Steel Products Co. of Akron; Kelsey-Hayes Wheel Co. of Detroit; Rudd Wheel Co. of Detroit; Jaxon Steel Products, Jackson; United Motors Service Corp., Detroit, and the Wire Wheel Corp. of America, Buffalo.

## Latest Wolverine 5-Passenger Sedan

LANSING, Oct. 5—A four-door, 5-passenger sedan has been added to the Wolverine line of the Reo Motor Car Co. The new model which lists at \$1,295 is finished in green lacquer. Upholstering and interior finish is in a light gray mohair type model. Swinging one-piece windshield, sun-visor, cowl lights and cowl ventilator are included. Standard equipment includes front bumper, rear bumperettes, hydraulic shock absorbers on the front springs, automatic windshield wiper, rear vision mirror and dash gasoline gage. Wood wheels are standard.

## National Standard Parts Assn. Elects

Many Prominent Manufacturers and Jobbers Are Made Members

### CONVENTION NOV. 14

CHICAGO, Oct. 6—At the meeting of the executive committee of the National Standard Parts Association, recently held at N. S. P. A. headquarters, the following applicants were elected to membership:

#### MANUFACTURERS

B. C. Ames Co., Waltham, Mass., I. R. Ames, vice-president.

Arrow Head Steel Products Co., 1101 Stinson Blvd., Minneapolis, Minn., W. C. Wilson, merchandising manager.

Bunting Brass & Bronze Co., 715-755 Spencer St., Toledo, Ohio, E. N. Beisheim.

H. A. Douglas Manufacturing Co., Bronson, Mich., C. R. Van Auken, sales manager.

Echlin & Echlin, Inc., 799 Golden Gate Ave., San Francisco, J. E. Echlin, president.

Heiz & Heiz, Bush Terminal Bldg. No. 7, Brooklyn, N. Y., Jos. Heiz.

National Machine & Tool Co., 801 S. Water St., Jackson, Mich., J. E. Dowley, president and general manager.

Wm. E. Pratt Manufacturing Co., 190 N. State St., Chicago, F. T. Radecke, vice-president.

Armstrong Cork Co., 24th St. & Allegheny River, Pittsburgh, F. L. Munroe, sales promotion manager.

Automotive Maintenance Machinery Co., 549 Washington St., W. Chicago, Frederick G. Wacker, president.

Diamond Motor Parts Co., St. Cloud, Minn., George G. Bouthinon, president.

Duckworth Chain & Mfg. Co., 41 Mill St., Springfield, Mass., Geo. D. Gilbert, sales manager.

Fleming Machine Co., 87 Mechanic St., Worcester, Mass., Geo. W. Fleming.

(Turn to page 12, please)

### Wiley of Auburn Sails

AUBURN, IND., Oct. 6—R. S. Wiley, export manager of the Auburn Automobile Co., sailed from New York Oct. 1 for a six weeks' tour of Europe. Mr. Wiley in company with Coldwell S. Johnson, European representative of the Auburn Automobile Co., will attend the automobile shows at London and Paris and will visit distributors for the Auburn Co.



## General Motors Host to Editors

263 From Press of Nation Are  
Guests of Corporation  
at Detroit

DETROIT, Oct. 1—"General Motors feels that the press of the nation is entitled to a generous measure of credit for the great public good will that has been bestowed upon the automotive industry. Consequently, we consider it an extraordinary privilege to have as our guests that group whose work has been so outstanding in placing the automobile in the leading position it now occupies in the public mind."

With these words, Alfred P. Sloan, Jr., president of General Motors Corp., welcomed 263 newspaper automobile editors and business paper representatives to Detroit for a three days' visit and inspection of General Motors activities last week.

There was not an inactive moment for the writers, as witness the following program of events:

Monday—Inspection of General Motors Building, trip through General Motors research laboratories, visit to Fisher Body tool and design plant, trip through Cadillac plant, dinner, Oldsmobile motion picture, theatre party.

Tuesday—Trip through Oakland, Pontiac, Buick and Chevrolet factories, banquet with R. H. Grant, vice-president of Chevrolet, as toastmaster, and C. F. Kettering, vice-president of General Motors, as principal speaker.

Wednesday—Trip to General Motors proving ground, with talk by O. T. Kreusser, its director, and talk by Alfred P. Sloan, Jr.

That part of Mr. Sloan's talk which is of most vital interest to automobile dealers generally is printed in this issue of MOTOR AGE, beginning on page 30.

## Moon Appoints Distributor in Argentine Territory

ST. LOUIS, Oct. 3—Edmund H. Serrano, director of exports of the Moon Motor Car Co., announces the appointment of Bresler & Co., Rivadavia 2254, Buenos Aires, as distributors of Moon and Diana cars in the Argentine.

## AC's Win Again

FLINT, MICH., Oct. 5—AC Spark Plugs scored a noteworthy victory at the Charlotte AAA race when "Babe" Stapp and Pete De Paola, both using AC's, won in the 100-mile and 50-mile events respectively. Cliff Woodbury and Dave Evans, also using AC's, finished second and third respectively in the event won by Stapp.

## Starkie and Amidon Partners

HARTFORD, CONN., Oct. 6—Harry Starkie, for many years the

## Thanks for a Good Job Well Done

SOMEBODY did an extraordinary job of organizing in connection with the entertainment of the country's automobile editors by General Motors. MOTOR AGE hereby awards the palm of efficiency to the punctilious Ben Koether, knowing that he will impartially distribute its fronds to all who had a part in the perfect management of the function.

Chevrolet dealer in Hartford and New Britain, and Charles F. Amidon, founder of the firm of Mohen & Amidon, have joined forces. On the first of next month they will open the Daylight Garage, 26 Park St., featuring a better grade of used cars.

## Kettering, With Associates, Sails

NEW YORK, Oct. 1—Headed by C. F. Kettering, vice-president of General Motors Corp. in charge of research, and E. G. Biechler, president of Frigidaire Corp., a group of General Motors executives sailed this morning on the Ile de France for an extensive survey of business conditions in Europe, with special reference to electric refrigeration.

Mr. Biechler said that electric refrigeration business in this country and abroad has brought it to third place in the General Motors family.

## Forum Auto Service Co.

QUINCY, ILL., Oct. 4—Earl Van Doren and Ray Meyer have opened their new auto repair and service station at Tenth and Broadway, operating as the Auto Service Co. Both men are widely known in automotive circles here and have been connected with dealers' and service organizations.

*Don't lay your wrench on  
a fresh-enameled fender.  
The enamel may stick to it and  
make your wrench look messy.*  
Flat Rate Red



## Baltimore Show to Feature Tools

Shop Equipment Exhibits Will  
Again Have Space in  
Annual Event

BALTIMORE, MD., Oct. 4—A shop equipment display will be included as a part of the annual Baltimore Automobile Trade Association show, which will be held Jan. 21-28. Last year was the first time that Baltimore had such a display and it was so successful that it has decided to include it again this year.

The Fifth Regiment Armory will again be the scene of the event. John E. Raine, secretary of the Association, as in past years, will manage the show and he and the committee are now hard at work working out the details.

A. H. Bishop, president of the association, is ex-officio member of the show committee. The other members are E. T. Backus, president of Backus Motor Co.; Walter F. Kneip, president of the local Franklin Company; Thomas W. Wilson, Jr., president of Wilson-Nash Motor Co.; Harter B. Hull, president of Harter B. Hull Co.; A. Stanley Zell, president of Zell Motor Car Co.; Louis Fox, president of Fox Motors, Inc.; Thomas G. Young, president of Auto Supply Co.; W. F. Terry, of the local Chevrolet company, and Joseph R. Manuel, president of Manuel-Reuling Motor Co.

## Mazda Automobile Lamp Prices Down 27 Per Cent

NEW YORK, Oct. 3—A price reduction in Mazda lamps for use in automobiles, averaging 27 per cent, is announced by Gerard Swope, president of the General Electric Co. This will amount to approximately 10 cents for each headlight lamp and 5 cents for most rear, side and instrument lamps.

Aside from economies effected by improved methods of manufacture, Mr. Swope said, changes in construction have been accomplished tending to reduce glare and to make night driving easier. One of these is the use of the corrugated headlight bulb, eliminating unnecessary filament reflections.

## Pence Sells Two Branches

MINNEAPOLIS, Oct. 3—The Pence Automobile Co. has disposed of two more branches, those at Duluth, Minn., and Minot. Out of nine branches for the distribution of Buick cars the company now retains those at Sioux Falls, S. D.; Fargo, N. D.; Butte, Mont.; Huron and Mitchell, S. D.

## Found Ellsworth Motor Co.

SALEM, OHIO, Oct. 6—The Ellsworth Chevrolet Co., of Salem, has been chartered to distribute the Chevrolet line and operate a service station.



### Here is Window Display Number 9

*Wells-Chevrolet Co., Spokane, Wash., found that this window display was one of the best that it had ever used. The airplane was a real one and the background of mountain and sky made it especially "life-like." This display was successful in bringing many hundreds of prospects into the store*

### Pool Interests to Insure Improvement of Highways

SAN FRANCISCO, Oct. 6—Continued improvement and development of two transcontinental thoroughfares—the Victory and the Lincoln highways—became assured here when the California State Automobile Association and the Victory Highway Association joined forces for the former and appointed C. C. Cottrell, of this city, as western manager for the united forces.

At the same time, California, Utah and Nevada pooled their interests to insure the paving of the last gap in the Lincoln Highway, according to W. P. Harrington, field secretary of the Lincoln association. All three states will devote their energies to the financing of the completion of the connecting link from Wendover, Utah, to Ely, Nev.

### Moto-Meter Retires Notes

NEW YORK, Oct. 4—Moto-Meter, Inc., has retired from earnings \$250,000 of 6 per cent notes given in partial payment for its subsidiary, National Gauge & Equipment Co. After completing the retirement, Moto-Meter and subsidiaries have between \$900,000 and \$1,000,000 cash on hand.

The current quarter has slowed up

as compared with the two previous quarters, because of a general slowing down in the automobile industry, nevertheless Moto-Meter, Inc., will show nine months' dividend at rate of \$3.60 annually, earned for the first three quarters of the year on its A stock.

### Hold First Aerial Business Meeting

LOS ANGELES, Oct. 3—The first business session of an automotive association ever held in the air is claimed by the Huntington Park Automobile Dealers' Bureau. Eleven members of the organization recently visited the Ford-Stout monoplane at Rogers Airport, as guests of Lloyd L. King, head of the Huntington Park Ford agency, where they boarded the huge aircraft and were given a trip over the various points of interest in the Southland. While the tour was under way a meeting was called to order and some business transacted.

### Hinkel Motor Corp. Gets Moon Diana Distribution

CLEVELAND, Oct. 4—Hinkel Motor Corp. will take over Moon and Diana distribution in 25 counties in northeastern Ohio. The head of the company is M. J. Hinkel, nationally known sports authority. F. G. Morris is general manager. The organization recently held a banquet at the Hotel Hollenden, with F. H. Rengers, sales manager of the Moon Motor Co. and Roy E. Gilliam, special territory representative, as guests.

### Atlanta Show Will be Biggest

ATLANTA, Oct. 6—Space sold in the Automobile Building at Lakewood Park in Atlanta for the annual Fall Automobile Show in connection with the Southeastern Fair Saturday, October, 1-8, inclusive, indicates that the 1927 event will be one of the largest fall shows ever held by the industry in Atlanta, according to officials of the Southeastern Fair Association.

Atlanta has had no spring show now in the past two years, and that the outlook for fall and winter business in the district is so good that nearly all dealers and distributors wish to display at this opportunity.



## National Standard Parts Assn. Elects

Many Prominent Names Are Added to Roster of Members

(Continued from page 9)

Johns-Manville Corp., 292 Madison Ave., New York, N. Y., John T. Spicer, mgr. gen. auto merchandising dept.

Pep Manufacturing Co., 33 W. 42nd St., New York, N. Y., Ralph Root, president.

Protex Chain Co., Inc., Waynesboro, Pa., O. M. Peters, secretary.

Ramsey Chain Co., Inc., 1031 Broadway, Albany, N. Y., Geo. R. Riendel, vice-president.

Sterling Products Corp., 2916 N. Market St., St. Louis, Mo., John Flammang, vice-president.

J. H. Williams & Co., Vulcan St., Buffalo, N. Y., Allan S. Maxwell, gen. sales mgr. stock products.

Schlieder Manufacturing Co., Box 89, Milford, Mich., V. W. Schlieder, vice-president and treasurer.

Thermoid Rubber Co., Whitehead Rd., Trenton, N. J., F. Robert Lee, sales manager.

Willis-Jones Machinery Co., Inc., 2418 9th Ave., S. Seattle, Wash., Al. M. Jones, president.

### JOBBER

Automotive Parts Co., 5911 Baum Blvd., Pittsburgh, L. H. Thompson, president.

Auto Parts Co., Ltd., Halifax, Nova Scotia, B. Scott Clark, secretary-treasurer.

Cicero Auto Parts Co., 5516 W. 22nd St., Cicero, Ill., Richard Willer, owner.

Gorey Automotive Parts Co., 354 W. 50th St., New York, Jos. C. Gorey, president.

Huntington Auto Supply Co., 940 Third Ave., Huntington, W. Va., J. H. Gussler, president.

Kramer Auto Supply Co., 5th & H Sts., Eureka, Calif., H. J. Kramer, proprietor.

### Dollar Down Tires?

AKRON, Oct. 3—Seiberling Rubber Co. is recommending a policy of instalment sales to its dealer organization. This recommendation is made following a study of instalment selling which several of its dealers in different parts of the country had made effective. The company is assisting dealers in each state to formulate a sales plan complying with the state laws.

Automotive Sales Co., Inc., 1361 S. Flower St., Los Angeles, G. R. Myers, president.

Car Parts Depot, Inc., 810 Texas St., El Paso, Tex., A. E. Graves, vice-president and manager.

Creel Bros., 1811 14th St., N. W., Washington, D. C., Robert T. Creel.

H. & E. Standard Auto Parts Co., 3925 Irving Park Blvd., Chicago, Harold J. Ellsworth.

Jones & Quinn, 3124 Locust St., St. Louis, Jos. A. Quinn.

Geo. W. Miller Co., Inc., 715 E. Pine St., Seattle, Wash., Edw. P. Marilley, manager and vice-president.

Motor Parts Sales Co., 536 Golden Gate Ave., San Francisco, H. W. Hansen, manager.

Northern Automotive Supply Co., 911 N. Water St., Bay City, Mich., O. M. Anderson, secretary-treasurer.

Nordling Parts Co., Inc., 678 Olive St., Eugene, Ore., G. J. Nordling, secretary-treasurer.

Richmond Auto Parts Co., 724 W. Broad St., Richmond, Va., H. B. Truslow.

W. A. Saunders, Inc., 824 W. Broad St., Richmond, Va., W. A. Saunders, secretary-treasurer.

### ASSOCIATE JOBBER

Motor Specialties, Ltd., Emily Place, Auckland, New Zealand, James Johnston, managing director.

## NASA Establishes Employment Dept.

Will Recommend Salesmen to Dealers—New Locals Forming

WASHINGTON, D. C., Oct. 6—Establishment of an employment department of the National Automotive Salesmen's Association as a service to dealers and to members of the organization was announced today at national headquarters.

Through this department of the N. A. S. A., it is pointed out by officials, automotive dealers will be enabled to get in touch with recommended men for their sales staffs, and members of the organization will be placed in contact with dealers who have signified their needs.

According to Eugene Ochsenreiter, president of the National Automotive Salesmen's Association and a member of the sales staff of the Semmes Motor Co., Washington Dodge distributor, establishment of the employment department of the newly formed body marks the first of a series of constructive efforts to be undertaken through the association.

"We have lost no time in organizing our employment division," Mr. Ochsenreiter points out, "because we have felt that for many years there has been an urgent need for such an agency. Our purpose is to make it a clearing house to which the automotive dealers of the country may turn and feel confident in the men who will be recommended to them."

Continued broadening of interest in the National Automotive Salesmen's Association is reported, with membership applications coming in from all sections. Among the centers where recent important additions to the organization's roster have occurred are San Francisco, New York, Shreveport, Minneapolis, Baltimore, Dallas, New Orleans, and other points.

## Why Do Some Dealers Fail?

**W**HY do some dealers fail? If we put this question to you in the privacy of your office you'd probably tell your stenographer to run out and have a rye high at the corner drugstore and then proceed to express yourself in a virile fashion. And it is also probable that you would give the question three healthy socks on the nose and register what in gutter parlance is known as a "gool." (We hope the questioner would not share in this distribution of fistic favors.) But, while you may have your own ready answers, you will be interested to know that in next week's issue of *MOTOR AGE* the question is given a solar plexus answer by none other than Roland Rowland, sales promotion manager of Willys-Overland, Inc.

Another article in the forthcoming number of *MOTOR AGE* is one that will inform you and your moiling mechanics "What the Hand Tool Kit Should Contain." Accompanying it will be a chart giving service shop operations and the tools required in such operations. Nothing so convincing of hand tool requirements has ever been compiled.

"Prospecting for Prospects," covers the field of prospect sources in a manner akin to that of the tent of the popular simile.

"A Repair Service That Spreads Happiness" will introduce you to the head man of a Cleveland shop who puts on tap a stream of confidential information that reveals the human interest side of running a repair shop.

We suggest that you take the mail carrier into your confidence and have him deliver your copy to you personally. That is one way of insuring your co-workers against a hospital siege.



## St. Louis Dealers May Adopt Plan

Southwest Nash Co's Service  
System Is Favored by  
Association

ST. LOUIS, MO., Oct. 5—Believing that the salvation of the service business of the automobile dealers in St. Louis lies in uniformity of practice as well as in honesty of service and believing that the system used by the Southwest Nash Motor Car Co. in connection with its service work would bring about this uniformity, the St. Louis Automobile Dealers' Assn., after consideration by its board of directors, has sent to each member of the organization a copy of the printed matter used by the Southwest Nash Co. in connection with its service work and suggests the adoption of the system by other members with such alterations in the printed matter which individual members may deem necessary.

Frank C. McDonald, president of Southwest Nash has indicated that he would be pleased to see other members of the association adopt the blanks used by his company.

There are seven pieces of printed matter contained in the service system used by Southwest Nash. They include:

A letter to the new owner introducing the service manager.

Reprint of standard service policy.  
The manufacturer's Warranty.

Card of introduction to service manager.

Card for free inspection at end of 500 miles.

Card for free inspection at end of 1000 miles.

Card giving night, holiday and emergency telephone numbers.

## Dufenhorst Co., Marmon Distributor, Builds Home

MILWAUKEE, Oct. 1—The A. E. Dufenhorst Co., Milwaukee, distributor of the Marmon in Wisconsin, now located at 182-184 Sixth St., is about to start construction work on a new headquarters building on Wisconsin Ave.

## Spicer Promoted

NEW YORK, Oct. 4—John T. Spicer has been appointed manager of the general automotive division of the Johns-Manville Corp. Spicer had previously been manager of automotive replacement sales for Johns-Manville, having gone there from the agency business. In a previous connection he had been general sales manager of the Thermoid Rubber Co. for eight years.

## Goodrich Opens Second

SPOKANE, WASH., Oct. 5—W. D. Goodrich, who has been in the tire business here for 10 years, is opening a second store in the Terminal building.

# Why Don't You Ask Us a Few?

*THERE would be nothing easier in our week's work—honest—than sitting down and banging out a list of ten questions for this weekly quiz. There are so many angles to this automotive business—mechanical, electrical, repairing, racing, legal, touring, historical and whatnot—that those of us who have been in the business for any length of time find little difficulty in thinking of interesting questions to ask. But we prefer to have you, Dear Reader, supply the questions and answers for the education and entertainment of your fellow-readers. Be good now, and come across with those pet questions and answers of yours.*

1. Why do good mechanics prefer to own their own tools? (Asked by Matt Dittman, Phila., Pa.)
2. What company uses the slogan, "The Wrench People"? (Asked by Tom Hudson, Buffalo, N. Y.)
3. Does lubricating oil freeze in winter? (Asked by A. F. Denham, Detroit, Mich.)
4. What make of piston is described as "The light alloy piston with a steel backbone." (Asked by C. K. B., Detroit, Mich.)
5. Is a voltage reading of any value in telling the condition of a battery? (Asked by C. A. Englebeck, Chicago, Ill.)
6. What company manufactures "Weather King" products? (Asked by P. J. Philpott, New York City.)
7. Why is the end-play in the crankshaft of an engine controlled by only one main bearing? (Asked by L. N. B., Indianapolis, Ind.)
8. Who is president of the Peerless Motor Car Corp.? (Asked by L. D. S., Cleveland, Ohio.)
9. A 3-in. cast-iron piston would be fitted with a .003-in. skirt clearance. The rings would have an end-gap of .009 in. Why the difference? (Asked by Joe Cunningham, Melrose Park, Pa.)
10. Where is "Prosperity Boulevard"? (Asked by C. A., Pontiac, Mich.)

## ANSWERS TO SEPT. 29 QUESTIONS \*

1. While most ammeters have 2 terminals, terminals are not used on all types of ammeters. The Westinghouse Co. makes an ammeter with no terminals. It has no coils and no current passes through the meter. (Asked and answered by C. E. Packer, Phila., Pa.)
2. An ammeter can work even though no current passes through it by making use of the magnetic field surrounding a wire which passes over the back of the meter. The wire from the generator to the battery is passed through a soft iron loop on the back of the meter, and the current, passing through the wire, magnetizes the loop and affects the needle. (Asked and answered by C. E. Packer, Phila., Pa.)
3. The reason that tubes behind a license plate or other obstruction on a radiator burst is that the water above and below the obstruction will freeze first, and then, when the water behind the obstruction freezes, there is no chance to expand upward or downward, so the tubes break. (Asked and answered by C. E. Packer, Phila., Pa.)
4. A storage battery may freeze in the winter, if it is not kept fully charged. A battery kept fully charged will not freeze. (Asked and answered by C. E. Packer, Phila., Pa.)
5. "Dependable" featured in Dodge Brothers advertising, is a single word which means much when applied to a person or thing. (Asked and answered by G. E. Lantz, Henshaw Motor Co., Boston, Mass.)
6. Edward G. Budd Mfg. Co., Philadelphia and Detroit, uses the slogan, "Originators of the All-Steel Full-Vision Automobile Body." (Asked and answered by D. C. Taylor, Phila., Pa.)
7. Studebaker manufactures a model called the "Commander." (Asked and answered by C. K. B., Detroit, Mich.)
8. "Perpetual Turnover" is a slogan applied to the Gilmer Fan Belt, manufactured by the L. H. Gilmer Co., Tacony, Phila., Pa. (Asked and answered by D. C. Taylor, Phila., Pa.)
9. Albert Champion's initials (A. C.) are used as a trademark for spark plugs, speedometers, air cleaners and oil filters. (Asked and answered by C. K. B., Detroit, Mich.)
10. Motor Wheel Corporation, Lansing, Mich., uses the slogan, "World's Largest Wheel Builder." (Asked and answered by C. K. B., Detroit, Mich.)

\* These answers are not guaranteed to be correct, but are obtained from sources we believe to be reliable.



### "Minor to Sullivan to Cairns"

Oakland has promoted these three men. W. T. Minor, the gent wearing his hat in the house, becomes district manager at Charlotte, succeeding W. A. Sullivan, the gentleman with the bone-rimmed cheaters, who in turn succeeds G. V. H. Cairns, the gentleman in the center, undistinguished by any special features. Mr. Cairns doesn't mind giving way to Sully because he goes to New York to take over the recently created position of New York retail sales manager.

## Miner, Hartford Pioneer, Returns

HARTFORD, CONN., Oct. 6—S. A. Miner, Hartford, Conn., who resigned from the Arrowhead Corp. last summer to take a much needed rest, has returned to the sales field and has opened a salesroom at 331 Connecticut Boulevard in the location formerly occupied by the Palace Motor Sales Corp. He will handle the Oldsmobile and Locomobile.

Mr. Miner had the Pierce-Arrow agency for many years, being one of the oldest dealers in the city and a charter member of the Hartford Automobile Dealers' Association. He was succeeded in the Pierce-Arrow agency by the newly organized Arrowhead Corp. with which he became identified as a special representative.

### Atlanta Also

ATLANTA, Oct. 5—The Atlanta Automobile Association, membership of which includes about 200 of the leading firms in Atlanta identified with the various branches of the automotive business, has gone on record protesting against the retention of the discriminatory war excise tax now levied by the Federal Government on passenger automobiles and buses, and has addressed communications to Georgia congressmen and senators urging them to use their influence in bringing about the repeal of this measure.

### Hinkel New Distributor for Moon

CLEVELAND, Oct. 4—The appointment of the Hinkel Motors Corp. as distributor for Moon and Diana cars in the northeastern district of the state of Ohio with Cleveland as headquarters, was formally announced at

a banquet at the Hotel Hollenden, Cleveland, last week.

F. G. (Fred) Morris is active head of the business.

### Show Space Drawing Set for Oct. 6; Directors Meet

NEW YORK, Oct. 5—Annual drawing for show space by members of the National Automobile Chamber of Commerce is scheduled for tomorrow. The directors held a meeting today, details of which are not available as this issue of MOTOR AGE goes to press.

### Nash Net Gains

CHICAGO, Oct. 5—Nash Motor Co. reported that for the third quarter of its fiscal year 1927, covering the months of June, July and August, and after deducting all the expenses of manufacturing and including depreciation, sales and administrative expenses and providing for local taxes and State and Federal income taxes, the net income amounted to \$6,298,624, as compared with \$4,643,658 for the corresponding quarter of 1926.

The total earnings for the nine months of the fiscal year of 1927 amount to \$15,790,259 against \$14,791,991 for the corresponding period of 1926.

"It might not be amiss to point out," stated Pres. C. W. Nash, "that although sales were the greatest in our history, following the introduction of our new models, we still might have done an even larger volume of business had our productive capacity been greater, as both July and August ended with more orders for immediate deliveries on our books than we could fill."

### Form Spratt Motor Co.

HICKORY, N. C., Oct. 3—Spratt Motor Co. has been chartered to do a general automobile business.

## New Ford to Be Named "Linford"

Many Details of Car Learned By Investigator for Texas Paper

WACO, TEX., Oct. 4—We have been repeatedly asked for information concerning the new Ford, and we are pleased to give our readers the full benefit of the information we have gleaned from first one source and another. Here it is:

The new Ford product will be known as the Linford, taking its name from Abraham Lincoln, its founder, and Henry Ford, its manufacturer. Some other name may be substituted.

The car will be equipped with a running gear, engine body, gasoline tank, radiator, and other accessories, usual to other automobiles.

The wheels, of which there will be four, will be set on axles and will turn around and around, forward or backward, depending on the choice and skill of the driver.

On the extreme front end, the car will be equipped with a radiator, which will serve as a reservoir for water with which to water the road. The front of the radiator will be meshed so as to be an excellent smasher of bugs, insects, other people's chickens and the like.

Situated somewhere on the car will be a gasoline tank which will contain a certain number of gallons of gasoline, or any liquid sold as gasoline by filling stations. A lesser number of gallons can be used if desired.

### Seats Equipped With Cushions

All seats will be equipped with cushions of more or less softness. On the touring and sedan model the rear seat will be placed directly behind the front seat. Both seats will be protected from sun, rain, etc., by a top.

In front of the front seat and behind the radiator will be placed a windshield which will serve as a barometer. When it is raining the windshield will become smeared with mud, water, etc., from passing vehicles.

The car will be guided by a steering wheel which will turn the car to the right or left, but never both ways at the same time.

Entrance to the car may be gained through doors cut somewhere in the body, or, if desired by climbing over.

The sedan and coupe model will be closed cars, and the touring cars and roadsters will be open cars.

The engine of the car will be usual in design and equipped with gears, rings, pistons, cylinders, spark plugs, wires and other doodads.

The car will be equipped with pneumatic tires, which will be placed over the wheels, tending to give the car a soft, airy, easy-riding feeling.

—Clipped by Lewis E. Starr, Herrick Hardware Co., Waco, Texas, from the Woodson (Texas) Reporter, "40 miles from a railroad."



## Puts Industry on Professional Plane

British Trade Institute Gives Degree as Evidence of Competence

NEW YORK, Oct. 6—Particulars of the Institute of the Motor Trade of Great Britain, which recently obtained its charter of incorporation after five years of experimentation, have been brought here by Alfred Reeves, general manager, National Automobile Chamber of Commerce, who was the speaker at their recent meeting in London. Details have been authorized for release here today.

The avowed object of the institute is "to raise the status of the motor industry as a whole to a position analogous to that of the professions—to which in consideration of the importance of transport to civilization, it is held to be entitled."

At the meeting attended by Mr. Reeves were the president, A. E. Gelder, and E. W. Garnon, who is the honorary secretary and founder of the plan.

This object is achieved first, by providing a test through which applicants many prove their competency; secondly, by encouraging and providing facilities for educating those who wish to attain the standard of competency that will enable them to pass that test.

The institute also has meetings where holders of its degrees hear papers and discuss matters connected with the efficient conduct of their businesses, so assisting in the continued progress of the industry toward better service to the public.

### Triplex Glass Optional on All Chrysler Models

NEW YORK, Oct. 3—The Chrysler Sales Corp., as a safety measure, is now prepared to offer Triplex glass as optional equipment on all models at a slight extra charge.

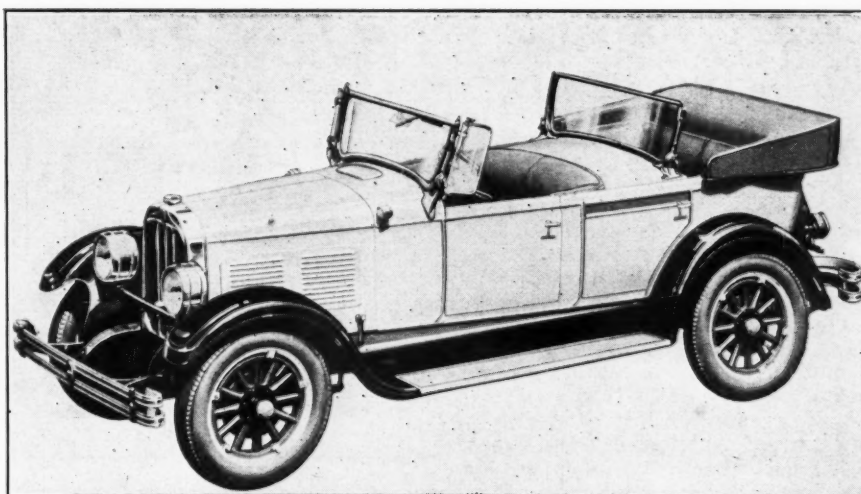
The manufacture of this glass was started in the United States last year by the Triplex Safety Glass Co. of New York. It is built of two layers of selected plate glass with a binding middle layer of pyroxalin plastic.

### You Don't Say So

FORT KENT, MINN., Oct. 6—Jim Kearns, well-known dealer, was host to his men at Ye Olde Dogge Wagonne the other evening, following the best year in Jim's history, since he remodeled his shop two years ago.

### Incorporate Stallman Co.

COLUMBUS, OHIO, Oct. 6—The Stallman Auto Body Co., of 297 Cleveland Ave., Columbus, has been chartered with a capital of \$25,000 to manu-



### Chandler's Newest Offering

*The outstanding feature of the newly announced Chandler sportster is that it is equipped with double, nickel trimmed windshields. The front windshield has been made more serviceable through the addition of wings. Both the front and rear windshields are adjustable and may be folded flat if desired, thus providing ample protection from the wind or allowing cool riding when the days are warm and sultry.*

facture all kinds of truck and passenger car bodies. The company will also do repainting and refinishing of motor cars. Incorporators are George E. Landis, Paul L. Selby and B. Chinn.

### St. Paul Tax Assessment Receipts Ten Million

ST. PAUL, Oct. 4—Receipts from registration of motor vehicles in the state today for the first time passed the \$10,000,000 mark, reaching \$10,008,288.68 compared with \$9,984,567.57 in 1926. Registration to date is 635,992 compared with 637,691 vehicles in all of 1926.

The average license fee paid to July 31 was 27 cents less than in 1926, or \$15.84 compared with \$16.11. Factory price cuts are responsible as the fee is based on the f.o.b. factory price. In the case of old cars the fee is based on the 1927 price with the annual 10 per cent reduction for age.

Registration of farm produce and general delivery trucks increased this year over 1926, but was less for commercial trucks. Registration of farmer trucks increased 16.14 per cent up to Sept. 1, or 35,070 compared with 30,175. Registration of delivery trucks was 39,002 compared with 36,522, but commercial trucks registered Sept. 1 numbered 2980 compared with 3987 in 1926.

### Transport Names Two Dealers

SPOKANE, Sept. 24—Two new dealers were appointed recently by Transport Motor Co., Spokane distributor of Willys-Knight and Whippet, according to Reynold C. Johnson, assistant manager. The new dealerships are the Stokke's Motor Co., at Wallace, headed by G. E. Stokke, and Micheals Garage, at Prosser.

## 300 Jobber Men Hear GMD Plan

NEW YORK, Oct. 3—More than 300 jobber executives and salesmen attended a luncheon meeting in New York last week as guests of New York Boosters Club, No. 13, to hear the first presentation of the Automotive Equipment Association's Greater Market Development program as it applies to the jobber salesman in the field.

The presentation was ably made by Harry G. Mook, director, who outlined the program, the "show-how" which will be available to jobber salesmen, and the entire program in which the salesmen will have the opportunity of participating.

As a result of the meeting an organization of metropolitan district jobber salesmen will be perfected to contact direct with the Market Development Department, that the best results may be obtained.

### Air Line Eight Popular

CLEVELAND, Oct. 5—Orders sufficient to keep the plant busy for the next 90 days have been received at the Jordan factory since the announcement of the new Air Line Eight, according to Edward S. Jordan, president.

The factory is well into production on the new models and expects within sixty days to have dealers supplied with all body types so that they can take care of a large portion of the initial orders.

### Mendenhal Robbed

SALT LAKE CITY, Oct. 4—The Mendenhal Auto Parts Co. has been entered for the fourth time within a month.



## NACC Forecasts Biggest Shows

### Applications for New York and Chicago Breaking All Records

NEW YORK, Oct. 5—Early applications for space in the National automobile shows at New York and Chicago, prior to the drawing for space tomorrow, promises even more representative expositions than the record-breaking affairs last January and February. Applications are arriving at headquarters of the National Automobile Chamber of Commerce and Motor and Accessory Manufacturers Association from all divisions of the industry.

All the car manufacturers and members of the representative makers of trucks and taxicabs have arranged to exhibit, while applications are regularly being received from the parts, accessory and service equipment makers.

Especially keen interest in the coming exhibitions is being shown by the service equipment manufacturers, according to the M. & A. M. A. These exhibitors will have a section in each show all to themselves, as was the case last winter, with the public excluded until 5 P. M. each day.

Several of the larger shop equipment makers in the M. & A. M. A. have applied for more space than they had last year, with the intention of making their exhibits more nearly resemble service stations with their equipment in use. Several applications have been received for more than 600 square feet of space each, indicating the extent to which these manufacturers propose to go in demonstrating their lines.

### St. Louis Olds Dealers Will Charge \$25 Initiation Fee

ST. LOUIS, MO., Oct. 6—At a recent meeting of the recently formed Oldsmobile Dealers' Association it was decided to charge an initiation fee of \$25, with a view to giving the association a financial standing which is expected to enlarge the interest of Oldsmobile dealers in St. Louis and St. Louis County.

Theron R. Green, of Marshall, Childress & Green Motor Co., Webster Groves, Mo., was elected secretary to succeed A. J. Brock, who asked to be freed from the duties of the office.

Every Oldsmobile dealer in the city was represented at the meeting.

### Goodyear's Good Year

AKRON, Oct. 5—The Goodyear Tire & Rubber Co. is doing the biggest business this year in its history, according to President P. W. Litchfield.

He says the rubber and tire industry as a whole has increased production 12 per cent over last year, and if sales continue as anticipated, all records will be broken in 1927 and 1928.



### Falcon-Knight Race Winner

Carl Marchese at the wheel of the Falcon-Knight roadster, winner of the 25-mile Midwest stock car race recently held at the state fairgrounds in Milwaukee. The Falcon-Knight covered the distance in 24 minutes, 23.4 seconds, an average of 61½ miles an hour. This was the car's first appearance on a race track.

The new Goodyear plant in Australia will begin operation about Oct. 1, and work is being pushed on the new manufacturing branch in England.

The experimental department of the company here has just perfected a new type bus and truck tire rim, it is announced.

### 385 Days Needed to Tour Entire State of California

SAN FRANCISCO, Oct. 5—If a motorist drove 200 miles a day for 385 days, he would be able to cover all the roads in California once. The total road mileage is 77,000. Traveling at the same rate, the motorist could cover the state highway system in 33 days, there being 6591 miles of it.

More than 200,000 motorists from other states and foreign countries drove through California last year.

California motorists contributed \$6,913,700 in automobile license fees last year.

The 3-cent gasoline tax will pay approximately \$30,000,000 a year to the state for a 12-year period.

The California State Automobile Association is responsible for these interesting figures.

## Willys-Overland to Make All Bodies

TOLEDO, Oct. 5—Manufacture of all bodies for Willys-Overland Co. within its own plant here will be in full swing by Dec. 1, when the new \$300,000 body plant will become available for us, it was announced today by Pres. John N. Willys.

For many years the company has purchased a portion of its bodies from independent body builders. Economies and closer inspection will result from the new plan. Mr. Willys indicated the company might be able to save \$5,000,000 a year through its operations in the body field, although no definite figures are yet available.

### Reduces Bank Obligations

AKRON, OHIO, Oct. 4—Reduction of bank obligations by a quarter of a million dollars since January has been effected by the India Tire & Rubber Co., according to an announcement by P. C. Searles, secretary and treasurer of the company.

## Original Body Designs Enlarge Commercial Motorcycle Sales

A MARKED increase of commercial motorcycle cars is reported by the Indian Motorcycle Co. this season, due in great part to the introduction of a new and diversified line of bodies. Original designs are being produced to accommodate and advertise various lines of business. One, which represents a huge battery, is meeting with favor on the part of battery merchants and service stations. Ice cream dealers are ordering bodies built to look like ice cream boxes and photograph

concerns are putting into service bodies representing cameras.

Among the most unusual of the standard bodies is one used as a demonstration outfit by the factory salesmen. It contains front and rear compartments to carry salesmen's supplies and is fitted with two Gladstone bags, a specially designed brief case, a portable typewriter and complete outfit of riding equipment. Thus the car serves the purpose of demonstrator and at the same time fills wardrobe requirements.

## Production 15 Per Cent Under 1926

Large Fourth Quarter Volume Not Expected—Output Downward

NEW YORK, Oct. 4—It is now fairly clear that automotive production this year will be around 15 per cent under the record-breaking year of 1926. This is approximately the rate at which the industry fell below in the first eight months of the year and the prospect that Ford production will add little to the total until the closing weeks of the year does not promise a very large fourth quarter.

The falling off in volume has been mainly in the passenger car field. Production of cars and trucks for eight months was 2,743,411 units against 3,237,933 in the corresponding period of 1926, a drop of 494,522 or 15.3 per cent. Cars alone, however, fell 17 per cent, or to 2,407,297 units against 2,896,148 last year. Trucks and buses fell only 1.6 per cent to 336,114 units against 341,788.

The drop in car production was mainly at the expense of Ford, the majority of other producers, large and small, recording gains.

Just now production is in the seasonal decline and the sales situation is unusually confused, with some territories reporting sharp drops from the August level and others on a level that compares favorably with last month and with the same period a year ago. Generally speaking, business is proving hard to get and factories and sales organizations are in a tense struggle to maintain volume.

### 2,265 Official Inspecting Stations Named for Mass.

CHICAGO, Oct. 5—Appointment of 2265 official inspecting stations was announced at the end of the Massachusetts "Be A Lifesaver" campaign, conducted in that state by the greater market development division of the A.E.A., according to Percy E. Chamberlain, assistant director.

John J. Hall, Massachusetts zone manager of the A.E.A. reported that more than 700,000 inspection stickers had been given out to motorists. Each sticker means that an automobile has been tested in one of the official service stations and has passed every safety requirement.

### Height Talks to 250

CINCINNATI, Oct. 5—A. G. Height, factory representative of the Simplex Ring Co. of Cleveland, addressed a gathering of 250 automobile dealers and garage men on automotive construction here last night. The gathering was arranged by L. A. Murray, local distributor for Simplex rings, who presided at the meeting.

## Jest—A Bit Cynical

By S. G. SWIFT

WITH life hanging a bit heavy and the A. E. A. Show a month and a thousand miles away, I am aroused from my lethargy by several letters received from England, New Zealand and Australia. A "fitter" working on a "Rolls" writes from London regarding a mechanical problem, that he "raised the bonnet and looked in the tray." An Australian asks for information as to "curing wheel patter or bounce." He says he has "tightened the thrust washers of the stub axle's swivel pins," whatever that is. Still another writes asking where may be obtained tools for "de-denting wings and valances"—he must have lost his, I mean valance—and taking up the "brasses." It looks as though we shall have to hire an English speaking technical editor. The present incumbent is a wizard, but he was reared in Chicago.

\* \* \* \*

I HAVE lost another chance to be a hero. This time concerns an opportunity to join the ranks of those in the advertising business, all of whom, as is well known, make tremendously large salaries and have meat twice a day. The thing started when a certain manufacturer expressed a desire to have a survey made of the used car situation. I insinuated myself into this man's good graces, had him out to the house for supper and finally asked him, somewhat timorously, to let me undertake the job. To my surprise, and to the chagrin of my wife—who had a dollar bet on the result—he acquiesced. Filled with visions of no money smaller than hundred dollar bills, I set forth to make my survey of the used car situation, a survey that I had privately decided would be as nearly perfect—if there are degrees of perfection—as I could possibly make it.

But I failed, and here I am, back writing the column.

I did my best, but despite my most arduous efforts, could find no used cars to survey. I got on the track of an occasional one, but upon investigation the rumors proved groundless. There simply were none.

\* \* \* \*

A SENTENCE from a letter to the mechanical editor says, "Many hereabouts have big Stearns-Knights." That's better than big heads, days.

\* \* \* \*

THE sluagh-gharin or slogorne, now called slogan—and meaning something entirely different than it did originally—is a matter of lively interest to me. I like them a bit witty myself, but that's mere preference; if you want 'em uplifting and thoroughly business-like, with a clear ringing challenge, here's one used by Bean Cars, Ltd., England: "You'll be Proud to be seen in a BEAN." This slogan, if it attains to widespread popularity, might lead a competitor to advertise, "You'll be proud to have Ben-zine in a BENZ."

\* \* \* \*

Say "yes" to your employer; strike an acquiescent pose;

You must always "yes" the boss, 'cause he's The Man Nobody Noes.

\* \* \* \*

SHAPES are out and the corset business is as ragged as a traveling man's B. V. D's. No one blows out the gas any more, they accomplish the same results by stepping on it and the average person under 50 thinks that the horse apple grows on the whiffletree. Everything changes—except pants-guards; those things you wear when and if you ride a bicycle. And the price is the same as always; five cents a pair for an excellent grade of guard. Don't ask me how I know.

\* \* \* \*

I wouldn't needlessly alarm you, but I believe you who read this column—if any—should be warned of the fact that the sale of pants guards appears, from figures compiled at Washington, to have increased 27.0412 per cent in the past year. That may mean real competition or it may be a temporary condition occasioned by the fact that former flivver owners, while awaiting the advent of the new Ford, are keeping in practice by riding the "safety," as we used to call the bicycle. Don't worry unduly about this. I'll keep you posted.

\* \* \* \*

PETER PENNOCK is trying to tell me that he recently overhauled a car. I know Peter of old; he uses his head more than he does his hands. Matt Dittman says Pete refers to overhauling a flivver on a hill with his Nash Convertible. That explains it.

\* \* \* \*

WHICH reminds me of a young woman who gave a blowout as an excuse for her midnight arrival. Her father, a pure and simple Jeffersonian Democrat, thought she meant a tire instead of a party.





### A Corner of Oakland's Broadway Salon

One corner of the permanent Broadway, New York, salon, recently opened by the Oakland Motor Car Co. The architecture, furnishings and murals are Colonial. The three-panel mural at the right shows an early scouting party discovering the beauties of the district in which the Oakland factory is now located. At the left is Governor Lewis Cass, of Michigan, signing the 1820 charter of the district, now known as Oakland county. Above is a bull's eye mirror copied from one in George Washington's Mt. Vernon home. The mirror has been converted into an indirect light. In the foreground is an exact copy of Washington's desk.

## Velie Announces a New Truck Model

MOLINE, ILL., Oct. 5—A one and one-half "Speed Truck," the Velie Model 40, on a 134 in. wheelbase, has been announced by the Velie Motors Corp.

The "Speed Truck" will transport one and one-half ton loads up to 50 miles or more per hour. Power is supplied by the Velie-built, six-cylinder, valve-in-head motor. Full forced feed lubrication to all moving parts contributes materially to long life and maximum motor efficiency. The crankshaft on the "Speed Truck" is extra large and heavy, weighing 92 lb. and having a bearing area of 21¼ square inches. An oil filter and gasoline purifier are provided to protect the cylinders from injurious impurities. The transmission has three speeds forward and one reverse.

Safety in operation is assured through the use of Lockheed Hydraulic four-wheel brakes on 16 in. drums of the internal expanding type.

### Chicago Nash Builds

CHICAGO, Oct. 4—A new three story building with approximately 21,000 ft. of floor space soon will be under construction at Twenty-fourth St. and Prairie Ave. for the Chicago Nash Co. H. T. Hollingshead, president of the company announced today. The building will be of steel and concrete and will be designed and equipped

to expedite Nash service. Large clear spans for service work will be provided with an easy grade 55 ft. ramp leading from the ground floor to the upper floors.

Show windows will face on three streets, Prairie and Indiana Avenues and Twenty-fourth Street. Offices of the company will be on the mezzanine floor connecting with the show rooms on the main floor.

## Peerless Races Across Jungles of South Africa, Beating Train-Time

FOUR-FOOTED denizens of South African jungles received the surprise of their lives a few days ago when a Peerless car went crashing through their primeval haunts, on a record-breaking road test from Cape Town to Johannesburg. It is not hard to imagine the tree-dwelling anthropoids tightening their grasp on a swaying tree trunk in dismay at the strange spectacle they saw.

Picture the coming of the speeding car, at first a slim finger of light piercing through the hazy darkness. Hanging vines and creepers writhing in the revealing view of the oncoming headlights. Silently and slowly it draws nearer, the drone of the motor increasing in intensity, then suddenly a low-hung car, jouncing over the rocky path, smashes past in a roar of dust and

## 102 Attend Second 72-Car Club Meet

St. Louis Zone Club Has Get-Together and Elects Officers

ST. LOUIS, Oct. 5—One hundred and two members attended the second annual convention of the Chevrolet 72-car club of the St. Louis zone held here last week with events at the Chevrolet factory, the Fairmount Jockey Club and Chase Hotel. Members have set the goal for next year at 150 cars.

New officers of the club are Oliver L. Parks, Gravois Motor Corporation, who sold 349 cars, president; R. A. Watts, Centralia, Ill., who sold 249 cars, treasurer. The zone officers installed were Vincent Bloch, president, Edward Weixel, vice-president, R. G. Whelan, secretary, and R. Edison, Iron-ton, Mo., treasurer.

A. W. L. Gilpin, regional sales manager of the Chevrolet Motor Co., Felix Doran, assistant regional sales manager, M. D. Atkins, regional sales promotion manager, C. J. Jackson, city sales manager and A. F. Diederich, assistant zone sales manager, attended.

At the banquet which closed the convention, Dr. Leon Harrison, rabbi of Temple Israel, was the principal speaker.

### Every Little Helps

WASHINGTON, Oct. 4—July automotive imports into India totaled 1199 cars and 694 trucks, of which 80 per cent are either of American make or made by branch manufacturers in Canada of American makers, the automotive division of the Department is advised by the American consul at Calcutta.

sand, two figures crouched in the driving seat; and then the tail-light sinks out of sight in the distance. The Peerless Six-80 is setting a record!

Such is the story brought to mind by cabled results of this record run by Peerless.

The long course is 966 long miles through jungles and over rocky paths, over roads that hardly deserve to be called roads, where trees often fall and lay until moved by passing travellers.

A Peerless Six-80 with fenders and windshield removed, travelled over this course at the highest rate of speed ever attained by any American or European car in Africa. The total elapsed time, despite all the rough going, was 25 hours and 25 minutes—four hours, 35 minutes faster than the dark continent's fastest train makes the run.





### New LaSalle Sedan Has Fisher Body

*This modish LaSalle five-passenger Imperial sedan is one of three new Fisher bodies originated for the LaSalle chassis with wheelbase length increased to 134 inches. A roof line that falls away at the rear in a particularly graceful curve, cabriolet rear quarters, and smoking set and vanity case set in alcoves, or recesses, above the armrests are features of particular interest. Finish of the Imperial sedan is such as to blend with the elegant lines, and both upholstery and interior fittings are of rare beauty*

## "Special" Formed for NSPA Show

CHICAGO, Oct. 5—So many reservations have been received by C. M. Burgess, president of the Chicago Division, National Standard Parts Association, that it has been decided to run a special train to Cleveland for the N. S. P. A. convention, rather than special cars, Mr. Burgess announced today.

The Chicago Division will leave the LaSalle St. station at 10.30 p. m., Sunday, Nov. 13, over the Nickel Plate Railroad. A solid Pullman train for the exclusive use of members and guests who will attend the convention in Cleveland will be provided without extra fare. The regular certificate plan of reduced rate on the return trip will apply.

The Chicago Division has invited guests, members and their friends passing through Chicago from the Northwest, South or Southwest, to avail themselves of the use of the special by having their tickets to Cleveland read, "Via Nickel Plate Railroad from Chicago." It is expected that approximately 200 will be aboard the train in Chicago. Reservations are being accepted for upper or lower berths, drawing rooms or compartments.

### Warner Forms Brake Co.

BELOIT, WIS., Oct. 4 — The Warner Electric Brake Co. has been incorporated with \$1,000,000 capital stock, to manufacture and market electric brakes for automobiles, perfected by A. P. Warner, who will be president of the company. Mr. Warner was former head of the Warner Instrument company, which later merged with the Stewart-Warner Autometer company.

The Warner device uses electrical energy to apply internal expanding me-

chanical brakes, the current required being less than that for operation of the car's horn, according to the inventor.

The Warner Manufacturing Co. will continue the manufacture of trailers, exactly as it has in the past, states Mr. Warner.

Officers and directors are A. P. Warner, president; C. H. Warner, vice president, and R. L. Pearce, secretary and treasurer; A. P. Warner, C. H. Warner, R. L. Pearce and Walter Inderrienden, directors. The Warner brothers are the designers of the brake, Mr. Inderrienden is an official of the Warner Patterson Co. and Mr. Pearce is acting for B. L. Rosset & Co. of Chicago.

The new corporation had planned to place \$500,000 worth of stock on the market.

## 1000 Hairpin Turns in 45 of 1000 Miles Sumatra Run of Willys-Knight

FROM far off Sumatra comes the story of one of the most remarkable endurance and reliability tests ever undergone by a motor car in that mountainous section of the world. This test was made by a Willys-Knight Great Six roadster in a 1000 mile journey, a portion of which was over the famous Bilege road, said to be the most irregular and difficult highway in the world.

Because of the nature of the roads traveled no attempt was made to establish a speed record. However, the car traversed the route in 33 hours, 24 minutes, the starting point being Koeta Radja, with the finish at Padang.

Not for an instant during the grueling test was the Knight sleeve valve permitted to stop, this being one of the

tests to which the car was subjected.

During a portion of the trip from Koeta Radja to Medan, a distance of 240 miles, a speed of 44 miles an hour was maintained.

Adverse conditions were encountered as the party left Siantar. The roadster fought its way through a heavy storm and eventually crossed the border from the East Coast Residency into Tapanoeli Residency, thence on to Bilege and Taroetoeng.

It was during the first 45 miles of the distance from Bilege that traveling became most perilous. This road, it is estimated has no less than 1000 reverse hairpin turns in that distance, requiring unusual care on this driver's part to avert an accident.

## Harry Hough, New Goodrich Co. Head

Succeeds Late Betram Work;  
D. M. Goodrich Heads  
Directorate

AKRON, O., Oct. 5—Harry Hough, vice-president and comptroller of the B. F. Goodrich Co. for the past ten years, has been elected president of the company to succeed the late Bertram G. Work.

The board at its special meeting, also named D. M. Goodrich, son of Dr. B. F. Goodrich, founder of the company, as chairman of the board of directors.

J. D. Tew, works manager, was promoted to be first vice-president and member of the executive committee, filling the vacancy left by the death of L. D. Brown.

Since Dr. Goodrich moved his little rubber company from Hastings-on-Hudson, N. Y., to Akron 57 years ago, there have been but three presidents, until the election of Mr. Hough. His predecessors were Dr. Goodrich, Col. George T. Perkins, and Mr. Work, Mr. Hough was a member of a large accounting firm before coming to Akron 10 years ago.

The realignment leaves Goodrich with three vice-presidents, viz: W. O. Rutherford, in charge of sales; C. B. Raymond and J. D. Tew.

### Beckley Ralston Buys

CHICAGO, Oct. 4—Beckley Ralston Co., wholesalers of automobile supplies, has purchased from the Murphy Varnish Co. the three-story plant at Dearborn, Twenty-Second and Federal Sts. The new plant after remodeling will give the Beckley Ralston Co. much additional space.

## New York Dealers Hold Annual Meet

Eastman, Chairman, With Bragg Secretary of State Committee

NEW YORK, Oct. 1—Plans concerning New York State legislation affecting the automobile trade, including the proposed gasoline taxes and compulsory insurance were the principal subjects for discussion at the annual dealers' meeting held last week in the offices of the Empire State Automobile Merchants' Association, Albany.

Lee J. Eastman, chairman of the legislative committee of the Automobile Merchants' Association of New York, was made chairman of the state committee to handle the program for the coming year. He is to be assisted by Charles Donohue of Rochester, F. H. Swanks of Elmira, W. Bell of Buffalo, W. B. Cherry of Syracuse, J. F. Haas of Brooklyn, and H. A. Rayne of Albany. Harry G. Bragg, general manager of the Automobile Merchants' Association of New York, Inc., has been appointed secretary to the chairman of the state committee. Mr. Bragg made arrangements for a meeting on Friday, Oct. 7, in New York City.

It is expected that as a result of this meeting steps will be taken by the automobile dealers throughout the state to prevent an increase of taxation in New York of any form.

The Automobile Merchants' Association of New York, Inc., has decided to affiliate with the American Arbitration Association for the use of voluntary arbitration as a means of settling business disputes.

The association has appointed the following members on its Arbitration Bureau: George Stowe, Reo, chairman; Wm. L. Colt, Chrysler; C. B. Warren, Nash; J. B. Hulett, Chandler, and Lee J. Eastman, Packard. H. G. McLearn is the counsel for the association.

## Bishop, McCormick & Bishop Have More N.Y. Territory

NEW YORK, Oct. 6—The franchise of Bishop, McCormick & Bishop, Dodge Brothers dealers in Brooklyn and Queens, has been extended to include Manhattan, the Bronx and a portion of Westchester County, effective Oct. 29.

The present holder of the franchise in Manhattan, the Bronx and Westchester County is C. H. Jennings, Inc., which has operated a chain of 30 sales and service establishments in the territory.

Bishop, McCormick & Bishop have about 15 establishments in Brooklyn and Queens. The president of the company is E. H. Bishop and C. M. Bishop is secretary and general manager. C. M. Bishop last year was a director of Dodge Brothers, Inc., under the plan whereby dealers are rotated as members of the board of directors.



WHEN Old Man Vett got a grip on a Lincoln penny he made the Indian spit hard cider from a busted Adam's apple. You could always tell a nickel that had passed through his hands because the buffalo was sway-backed.



He'd do anything to save a cent. But now, for the first time in his life, he's wondering if penny-pinching is always profitable.

Here's the story. Last spring he put in another gas tank to care for the increasing traffic over the new county road. The pump never worked right. Sometimes it gave three for five; other times it didn't work at all. As often as not it might give 12 or 15 gallons for 10. You never could tell. The customers quit in droves. They passed the word that Old Man Vett and his pumps were gypsies. Finally the old man had to do something. This involved the breaking up of 12 feet of new cement sidewalk. And because he was still pinching the pennies and had the walk relaid by his garage force, he was out \$75 more when the county commissioner objected to the amateurish way the work was done and an expert had to be called in to do it over.

The trouble, when located, proved to be the second-hand check valve that the old man had bought of a junkie for \$2. That was the first cost. The last cost was \$200, and a lot of trade. Which is a high price to pay for a check valve.

Rx

"Buy cheap; cry cheap"—that's from the Talmud; "Penny wise; Pound foolish"—that's from Dickens; "Save at the bung; waste at the spigot"—that's from the Gideons.

Old Doc Turnover B.D.  
(Business Doctor)

## \$6,820,971 Dodge Net

NEW YORK, Oct. 1—Dodge Brothers, Inc., net income for eight months ended Aug. 31 amounted to \$6,820,971 after charges and federal taxes, equivalent after allowances for preferred requirements to \$1.19 a share earned on 2,435,023 no par shares of combined Class A and Class B stocks.

Current assets on Aug. 31 amounted to more than \$47,000,000, of which more than \$13,000,000 was cash and more than \$5,500,000 marketable securities, comparing with current liabilities of about \$18,000,000.

## Name Studebaker Model Winners

Prize Contest for Boys Popular—Attracts Attention of Ten Thousand

SOUTH BEND, IND., Oct. 6—The 12 national winners in the Studebaker Boys' Model Contest, which provided 108 prizes for boys who made models of the Studebaker Dictator sedan, have been announced by the Studebaker Corp. of America.

The boys who won the national prizes are:

Class A (Models less than 8 in. long). Group 1 (Grammar School Boys). First prize: Leonard Von Dollen, 317 East Fifth St., Grand Island, Nebr.; second, Charles Vukowich, Lead St., Bessemer, Mich.; third, John Arthur Cabeen, 605 West Elm, Paris, Ill.

Class A (Models less than 8 in. long). Group 2 (High School Boys). First prize: Lowell Stouder, 117 Huron St., Goshen, Ind.; second, Leif Juhl, 822 N. Third St., Clinton, Iowa; third, William L. Bunn, 852 Newell Ave., Muscatine, Iowa.

Class B (Models less than 24 in. long). Group 1 (Grammar School Boys). First prize: Charles Cresmer, 556 East Twentieth St., Long Beach, Calif.; second, Carl Woyton, 2323 N. Second St., Philadelphia, Pa.; third, Raymond Koehler, Hunter, N. D.

Class B (Models less than 24 in. long). Group 2 (High School Boys). First prize: Robert Exley, 638 East Astor Ave., Colville, Wash.; second, Frank L. Lajko, 289 Poplar St., Akron, Ohio; third, Billie Wyatt, Route 2, Bristol, Va.

Prizes for these boys are being mailed out from the Studebaker administration offices at the present time. In addition every boy who completed a model is to be awarded a radium lighted watch.

The contest, which was one of the most unusual ever staged in America, attracted the efforts of more than 10,000 young Americans.

## M.A.M.A. Service Equipment Committee Adds 2

NEW YORK, Oct. 4—With the addition of two new members, the Service Equipment Committee of the Motor & Accessory Manufacturers' Association has been reorganized for the coming year.

The committee will work with Neal G. Adair, manager of the sales development department, in the promotion and conduct of the service equipment sections of the National Automobile shows and the Boston show and in distribution research work.

The new members are J. J. Burke, Brunner Mfg. Co., and Malcolm McCormick, Walker Mfg. Co. The hold-over members are R. W. Procter, Black & Decker Mfg. Co.; B. M. Asch, Asch & Co., and H. M. Smith, Manley Mfg. Co.



## Lancia to be Sold in United States

Car Will Be Built of Units  
Made in Italy and  
America

NEW YORK, Oct. 5—Lancia Motors of America, Inc., has been chartered under the laws of New York with a paid in capital of \$1,000,000 for the manufacture and sale of a new Lancia car in the United States. The engine, transmission and differential will be manufactured by the Lancia Automobile Co. of Turin, Italy, but other parts units will be of American manufacture and assembling of the complete job will be done here. Negotiations for an assembling plant are now underway.

The American car is 128 in. wheel-base and the engine an eight-cylinder Monoblock V Type. Although prices have not been definitely established, the four or five body types in the regular line will sell for around \$3,500, representing an enormous saving under the cost of importing a complete car.

The Italian company has joined with American capital in the formation of the American company. Vincent Lancia will be chairman of the board of Lancia Motors of America. It is understood that Anthony Flocker who has represented Lancia in the country for some time will be president. Besides Mr. Flocker, incorporators of the new company are Michael F. Longo and Joseph A. Tinton, all of New York City. The formation of the American company follows an expansion of the productive facilities of the Italian company which made desirable the seeking of new outlets. The plant, which is sought in the United States, will have a capacity of about 20 units daily. Additional engine specifications include overhead valve cylinders, 2¾ by 4 in., maximum r. p. m. 3600. This engine was recently perfected by the Lancia Automobile Co., but other features of the car will follow the lines of the Lancia Lambda series. The special Lancia practice whereby frame and body are combined will be followed in the new car.

## Accident Prevention to be N. Y. University Course

NEW YORK, Oct. 3—A course in accident prevention and industrial safety will be started today by the New York University, with the cooperation of the American Museum of Safety.

The outline of the course has special reference to motor vehicle safety.

## McKeever Advanced

DETROIT, Oct. 3—A. E. McKeever, former general manager of the Hertz-Drivurself Automobile rental stations in Philadelphia, has been appointed assistant general manager of the Hertz stations operating in Michigan and Indiana.

## CLOSE UP AND LOW DOWNS

By SAM U. L. SPARKS

SOME people reckoning only two seasons—"busy" and "dull" but they's yet another one which if they would pay a little attention to it they wouldn't be no dull season. What I mean the "hibernating" season.

No sooner is the frost on the punkin and the corn in the shock when some automobile salesman get a notion they are a woodchuck and start hibernating.



Just because winter comes and spring ain't far behind ain't no reason why it had ought to be a winter of discontent. While you are telling the world how bad business is, some other guy is libel to go out and sell a car to the prospect which you had on your program for next spring.

\* \* \* \*

You hear a lot about "all outdoors calls you" and "somewheres west of Lari-mie," if you know what I mean, but most generally if you wanta see a spic and span roadster you have gotta go inside a showroom to do it. I saw it done a different way the other day.

Not here at Sparks Corners, but in the city, by a dealer which has one of them set-back places with a big lawn in front. He had a roadster on the lawn between his store and the sidewalk, and a card, which it says, "\$1,395, fully equipped."

A lotta people get a eye full of it every day, and some people can stand seeing something fine just so often until they get to thinking they had ought to have it.

Putting that car out in the open looked like a good hunch to me. Some cars "sell themselves" if you give them half a chance.

\* \* \* \*

I know a lotta self-made men. Some of them didn't stick to the job very long.

\* \* \* \*

"Sleep is a habit," according to one of them scientists which he says you can train yourself to get along on three or four hours of sleep.

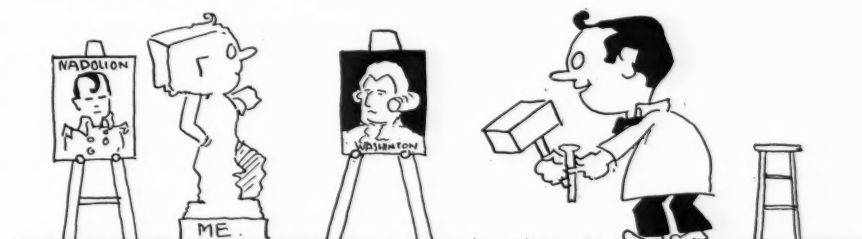
I know a lotta guys that would be whirlwinds if they trained their-selves to be wide awake that many hours a day.

\* \* \* \*

Nowadays a guy had ought to keep his eyes open. What I mean, if you want your dreams to come true, you gotta wake up and give them a chance. A wide-awake guy don't never fall asleep at the switch.

\* \* \* \*

Sometimes the truth hadn't ought to be spoke too plain. No doubt the announcer at the latest battle of the century knowed he was stretching the truth, but he kept yelling "Ladies and gentlemen" until some of them thought he meant them, and after a while they kept quiet and listened to his announcements.



It's the same way when you are selling something. You maybe think your prospect is a goof, but it ain't going to do no harm to call him "a business man" and ask him now and then what his opinion is. The more you listen to him, the more level-headed he will think you are.

\* \* \* \*

I been hearing a lot about the big gate at Chicago, but I ain't seen any-one which could tell me how much it weighed.



## Kokomo Firms Merge; \$1,500,000

Kokomo Brass, Byrne Kingston, Kokomo Electric Form Group

KOKOMO, IND., Oct. 5—A merger is announced of the Kokomo Brass Works, Byrne, Kingston & Co., and the Kokomo Electric Co., three closely allied firms which have been engaged in automotive manufacturing for many years here. The new firm, the Kingston Products Corporation, is incorporated at \$1,500,000.

Officers of the new company are as follows: Paul Johnson, president and general manager; Frank C. Ryan, secretary and treasurer; directors: Paul Johnson, Frank C. Ryan, Carlton M. Higbie (Detroit), Fay Beal and Karl Johnson. Other stockholders are Ralph G. Kingston, John P. Grace and a number of executives of the organization.

According to a statement from the president, large savings are expected to result from the centralized control of the executive interests and from the improved facilities for volume production. Mr. Johnson asserted that the merger in no wise implies a refinancing of the group and stated that none would be made.

The superintendents throughout the factories of the firms, together with the engineering staffs, are composed largely of veteran men who have been with the companies for many years.

## Atlanta Auto Show Will be Biggest in Southeast

ATLANTA, Oct. 3—That the annual fall automobile show will be the largest ever held in the Southeast, is the opinion of officials of the fair who state that for the first time in the history of the show every available foot of space in the automobile building at the show ground has been sold for the event. The reason for this, Atlanta dealers and distributors state, is the fact that the high cotton and other crop prices prevailing has greatly eased the financial situation in the South and substantially increased the market for cars. The dates are Oct. 1 to 8.

## Another New AC Building

FLINT, MICH., Oct. 4—The AC Spark Plug Co. is erecting another building at its East Side plant here, according to an announcement by Albert Champion, president of the company. The new structure will provide additional manufacturing facilities in the main plant.

## Dempsey Gets More Territory

CHICAGO, Oct. 5—Chas. J. Dempsey, Inc., Ford dealer at 2300 W. Madison St., has been selected as the only

authorized Lincoln dealer on the West side of Chicago which includes the suburbs of Oak Park, River Forest, Forest Park, Berwyn, Riverside and Maywood.

It is stated that the Ford Motor Co. has decided to merchandise the Lincoln through a smaller number of dealers and the selection of Dempsey as the West Side representative is in line with this new policy.

## Hertz-Drivursel Corp. to Add Many More Buicks

FLINT, MICH., Oct. 3—The Hertz Drivursel Corp., which controls the operation of more than 300 automobile rental stations throughout the United States and Canada, has decided upon a substantial increase in the number of Buicks among its fleets, according to word from C. W. Litsey, of Chicago, vice-president and general manager of the Hertz organization.

## Diary of a "Hard-Luck" Salesman

- 9.11—Looked over racing results.
- 9.46—Stopped to see show-window circus put on by lady advocating hair tonic.
- 10.05—Held curbstone conference with old acquaintance.
- 10.37—Helped 1000 other people watch messenger boy feeding pigeons.
- 11.00—Called on prospect. No luck.
- 11.02—Had measure taken for new pipe.
- 11.30—Phoned my favorite boyish bob. Closed big deal for Saturday night.
- 12.18—Went to see about new radio batteries.
- 12.45—Time out for lunch.
- 2.10—Joined excited posse watching man put on new tire.
- 2.31—Called on prospect. This fish is dead and buried from the eyebrows back.
- 2.33—Watched derrick lifting steel beams. Very educational.
- 3.12—Had argument with guy for stepping on my foot.
- 3.35—Called up prospect I forgot I had date with. No luck.
- 3.49—Joined class studying modern methods of moving a safe.
- 4.15—Called on prospect. No luck.
- 4.17—Decided to cross street.
- 4.32—Bulletin. Landed safely!
- 4.41—Quit for the day. Lotta hard work. No luck.

—Clipped.

## Reeves Forecasts Excise Tax Repeal

Should Have Been Abolished Years Ago, N.A.C.C. Chief Says

WASHINGTON, Oct. 5—A prediction that congress "in its wisdom" will repeal the three per cent excise tax still on passenger automobiles, was made here this week by Alfred Reeves, general manager of the National Automobile Chamber of Commerce.

"With everyone against the tax, it is my firm belief that congress at the forthcoming session of congress will abolish it," Mr. Reeves declared, pointing out that unless it is repealed at this time it might become a permanent tax such as is levied on tobacco.

He declared that the abolition of the 10-year-old war excise tax, should have been done years ago. "The Chamber, the American Automobile Association, the National Automobile Dealers Association, parts and body builders and individual users must use their influence with their congressmen and let them know their views on the elimination of the tax," Mr. Reeves urges.

## Florida Has More Than 500 Automotive Dealers

ATLANTA, Oct. 4—In an effort to show that the bursting of the Florida real estate boom did not have as disastrous an effect on business in that state as the general public seems to think, officials of Florida recently issued a list of the number of retail and wholesale firms doing business in the larger Florida centers, which shows that there are a larger number of such firms now than at the height of the boom, outside the real estate field.

In the automobile field there are 340 firms handling passenger cars and trucks in the state, many of them also acting as wholesale distributors, while in the automotive supply field there are 195 firms of which number 13 are exclusively wholesale.

## Heger Heads Paige Branch

EVANSVILLE, IND., Oct. 4—The Paige-Indiana Co., direct factory branch opened Oct. 1 at 312-314 Locust St. The branch will operate both wholesale and retail departments. It will supply six counties of southern Indiana, eight counties of southern Illinois, and 22 counties of western Kentucky. R. F. Heger, formerly of this city, and for several years with the Graham Brothers industries, Detroit, is manager of the new Paige distribution center.

## Edwards Joins Western Motor Co.

SPOKANE, WASH., Oct. 5—George J. Edwards has joined the wholesale department of Western Motor Co., Hupp distributor.

## Senator Smoot Talks at Utah

Thinks Corporation Tax  
Should Be Abolished First;  
Car Excise Second

SALT LAKE CITY, Oct. 4—"Although the excise tax upon the automobile industry has been reduced 2 per cent since the World War, it is still high and discriminatory, and I hope for its ultimate abolishment," declared Senator Reed Smoot of Utah in a talk yesterday before the Utah Automobile Dealers' Association at the Hotel Utah.

The Senator thought, however, the first reduction should be in the corporation tax and the next in the excise taxes, including the tax on automobiles. He doubted whether relief might be expected soon because of the heavy appropriations the government was called upon to make for the Mississippi flood relief, Boulder dam project, St. Lawrence canal, etc. The speaker urged the members of the automobile industry of the state to steer clear of off-color tactics, saying that they accomplished no good.

President Melvin R. Ballard of the Association, who is vice-president and general manager of the Covey-Ballard Motor Co., presided at the meeting.

## Predict Car for Every 2.8 Persons in Ohio by 1935

COLUMBUS, OHIO, Oct. 5—The Federal road expert believes that in 1935 there will be one automobile for every 2.8 persons in this state.

## Designs Engine to Top 203 m.p.h. Mark

LOS ANGELES, Oct. 3—Harry A. Miller, famous builder of racing car motors, has completely designed an engine to break the 203 m.p.h. record established by Major Segrave, but no decision has been reached as to when it will be assembled. Ever since the English speed demon hung up his new record, Miller has been keenly interested in eclipsing it, but he does not see the wisdom of his organization shouldering the entire financial burdens.

Should an incentive be provided, Miller is prepared to have the engine completed in short order.

While complete engineering details of the engine are not available for publication, it is known there is nothing freakish called for in its construction. The engine would not be abnormally large in size, as was the case with Segrave's engine.

The sum of \$100,000,000 must be spent within the next five years in the reconstruction and widening of the highways of Ohio, if it is to cope with the ever-increasing requirements of traffic. This is the gist of the report of the Federal road experts submitted Sept. 24.

## Approve Lupton Recapitalization

Stockholders O.K. Move That  
Will Make Necessary  
Funds Available

PHILADELPHIA, Oct. 3—Stockholders of David Lupton's Sons Co., have approved recapitalization plans under which \$5,000,000 in 6 per cent first mortgage gold bonds, \$5,000,000 in 7 per cent cumulative preferred stock and 300,000 shares of common stock without par value are authorized. Of these \$2,000,000 of the bonds, \$1,100,000 of the preferred stock, and 100,000 shares of the common stock are to be outstanding.

The proceeds of the financing will be used to retire current obligations, which include the cost to date of extensive plant additions and improvements, provide funds for the balance of improvements and for additional working capital.

## Elliott Springs to Fly In Blackhawk Roadster

CHARLOTTE, N. C., Oct. 4—Stutz Blackhawk Roadster, No. 4, winner in the recently held 75-mile stock car race here, was sold to Capt. Elliott Springs, of Fort Mill, S. C., American ace in the World War, now a prominent author, according to an announcement made here by Col. C. E. Gorrell, vice-president of the Stutz Motor Car Co. of America, Inc., of Indianapolis. Col. Gorrell was chief-of-staff of the A. E. F. Air Force.

# What's Coming in Motordom

### SHOWS

Automotive Equipment Association, Coliseum, Chicago .....Nov. 7-12  
\*Baltimore, 5th Regiment Armory, Jan. 21-28  
\*Boston, Mechanics Bldg. ....March 10-17  
Brooklyn, Brooklyn Motor Vehicle Dealers Association, 23rd Regiment Armory .....Jan. 21-28  
Buffalo .....Jan. 14-21  
Camden, N. J., Convention Hall, Jan. 30-Feb. 4  
\*Chicago, National Automobile Chamber of Commerce, Coliseum, Jan. 28-Feb. 4  
\*Cincinnati, Music Hall .....Jan. 14-21  
\*Cleveland, Public Auditorium.....Jan. 21-28  
Columbus .....Jan. 14-21  
\*Dallas, Texas, Automobile Building, Oct. 8-23  
Deadwood, S. D., Auditorium.....Feb. 20-25  
Denver, Auditorium .....Feb. 27-March 3  
Des Moines, Coliseum .....Feb. 20-25  
Detroit, Convention Hall .....Jan. 21-28  
Hartford, Conn., State Armory.....Feb. 18-25  
Holyoke, Mass., Charlton Bldg.....Oct. 12-15  
Indianapolis, Auto Show Bldg.....Feb. 13-18  
\*Kansas City, Mo., American Royal Bldg. ....Feb. 11-18  
\*Louisville, Ky., Jefferson County Armory .....Jan. 16-21  
\*Milwaukee Auditorium .....Jan. 14-21  
Minneapolis, Municipal Auditorium, Feb. 4-11  
\*Montreal, Canada, Motordrome.....Jan. 21-28  
Muskegon, Mich., Armory .....Feb. 21-25  
National Standard Parts Association, Convention Hall, Cleveland.....Nov. 14-18  
Newark, Armory .....Jan. 14-21  
\*New York, National Automobile Chamber of Commerce, Grand Central Palace .....Jan. 7-14

## Coming Feature Issues of Chilton Class Journal Publications

Nov. 10—Marketing Annual—  
Motor World Wholesale.  
Feb. 18—Statistical Issue—Auto-  
mobile Industries.

\*Philadelphia, Commercial Museum, Jan. 14-21  
Providence, R. I., Cranston Street Armory .....Feb. 11-18  
Rochester, N. Y., Edgewater Park, Jan. 23-28  
Salon, Automobile Salon, Inc., Hotel Drake, Chicago .....Jan. 28-Feb. 4  
Salon, Automobile Salon, Inc., Hotel Biltmore, Los Angeles .....Feb. 11-18  
Salon, Automobile Salon, Inc., Hotel Commodore, New York.....Nov. 27-Dec. 3  
Salon, Automobile Salon, Inc., Palace Hotel, San Francisco.....Feb. 25-March 3  
Salon, Los Angeles Motor Car Dealers Association, Hotel Biltmore.....Oct. 18-21  
San Bernardino, Cal., National Orange Show Bldg. ....Feb. 16-26  
\*San Francisco, Civic Auditorium, Jan. 28-Feb. 4  
Sheboygan, Wis., Eagles Auditorium, Feb. 6-12

Springfield, Ill., State Arsenal.....March 7-10  
Springfield, Mass., Municipal Auditorium .....Feb. 27-March 3  
\*St. Louis, City Market Bldg. ....Feb. 20-25  
Syracuse, State Armory .....Feb. 6-11  
Trenton, N. J., State Armory.....Feb. 18-25  
Washington, D. C., Auditorium, Jan. 28-Feb. 4  
Wichita, Kans. ....Feb. 6-11

\* Will have special shop equipment exhibit.

### CONVENTIONS

Automotive Equipment Association, Coliseum, Chicago .....Nov. 7-12  
Iowa Automotive Merchants Association, Fort Dodge .....Oct. 28  
Michigan Automobile Trade Association, Annual Meeting, Hotel Statler, Detroit .....Jan. 25  
National Association of Finance Companies, Congress Hotel, Chicago, Nov. 14-15  
National Standard Parts Association, Hotel Hollenden, Cleveland, Nov. 14-18  
National Tire Dealers Association, Brown Hotel, Louisville, Ky., Nov. 15-17  
Texas State Tire Dealers Association, Dallas .....Oct. 12

### N. A. D. A.

Chicago, Jan. 31-Feb. 2—Annual, Palmer House.  
Chicago, Feb. 1—Banquet, Palmer House.  
New York, Jan. 9-10—Eastern District, Hotel Commodore.

### S. A. E.

Chicago, October 25-27—National Transportation and Service Meeting, Hotel Sherman.  
Detroit, Jan. 24-27—Annual Meeting.  
New York, Jan. 12—Annual Dinner.



## Gas, Oil and Hot Dogs—Drive In

A ROCHESTER automobile supply house gives accident policies free with its purchases. Hot dog stands should supply doctor's services free.

"You'll have to admit," said the back-door tool peddler, "that I have a good line." "You sure have," answered the mechanic, "but it is the tools I object to."

Whippet introduces all-purpose coach, factory announces. "Isn't that going a bit too far?"

Car licenses now based on weight in Georgia. Georgia at last has found a way.

Municipal government of Reno, Nev., has decided to abandon the street car line there. If we are to judge by Reno's divorce reputation, the trolley line is not the only abandoned thing within the city precincts.

If Buffalo Dealers Hold Semi-Annual Meeting," would that be a semi-animal meeting?

The New Wolverine Sed-Ann must be the modern version of the Wolf and Little Red Riding Hood.

Eskew Chevrolet Co. has been formed in Woodruff, S. C. What's in a name I Eskew?

Arthur Dove is a prominent paint manufacturer in Detroit. That's a bird of a name.

We hope we shall soon hear, "Olds Motor Wks. Puts on Night Shift," so we can spring it as, "Olds Motor Works While You Sleep."

A real estate dealer in a suburb of Philadelphia advertised in Oct. 2 Sunday papers, "A Chevrolet Sedan Free With Every House Sold." "That auto help take care of the running expenses," says the aforementioned and much quoted office stenog.

"Stevens Bastian Blessing Assistant Sales Head," says headline in MOTOR AGE. Assistant sales heads are frequently targets for maledictions. A benediction is in the nature of news.

Builds electric door opener. If this means we won't have to look for keyholes at 3 a. m. we know a dozen live prospects. Live, that is, if you're not prejudiced against a semi-comatose condition.

"Snow Heads Engineering at Auburn," says another headline in the trade's oldest and newsiest weekly. No, impetuous reader, Snow Heads are not the opposites of Red Heads. ("And Massachusetts," says the office stenog, "has its Marblehead.")

Overland star salesmen see Tunney win fight. Evidently they didn't have one of those \$5 seats located out in Indiana.

General Electric lowers Mazda lamp prices 27 per cent. More power to them.

Fisher and Bitting have taken places on the board of Baldwin Locomotive Works. With such able men at court, mayhap in the future locomotives and automobiles will show signs of friendship at grade crossings.

Quarter shipments seen higher, headlines AUTOMOTIVE INDUSTRIES. If these were mint consignments we're going to send out tracers.

Seiberling promotes time tire selling, we read. Which suggests a slogan the "It's time to re-tire" people may have without credit: "Re-tire on time."

## John Cleary Says—

*The text for our matutinal meditations this week is taken from Charlie Schwab's Epistle to the Pennsylvanians — IX, 20, 1927.*

*"You cannot be successful in your business unless you like it and are happy in it.*

*"If you do not like your business and are not happy in it, you had better leave it and enter some business that you do like and where you can be happy."*

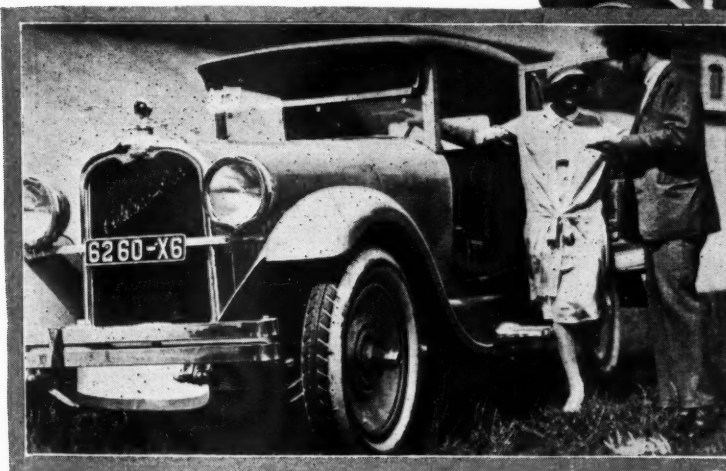


# Winners



Tommy Armour celebrated the winning of the open golf championship this year by buying "his heart's desire," as he put it—a Weymann Biarritz Safety Stutz sedan. This, pardon the remark, is a hole in one—pocketbook

At right the well-known twain have met on top of Mount Spokane, the highest point reached by automobile road in Washington. The gentleman disregarding a social nicety is James Whitelaw, of Wells-Chevrolet Co., Spokane

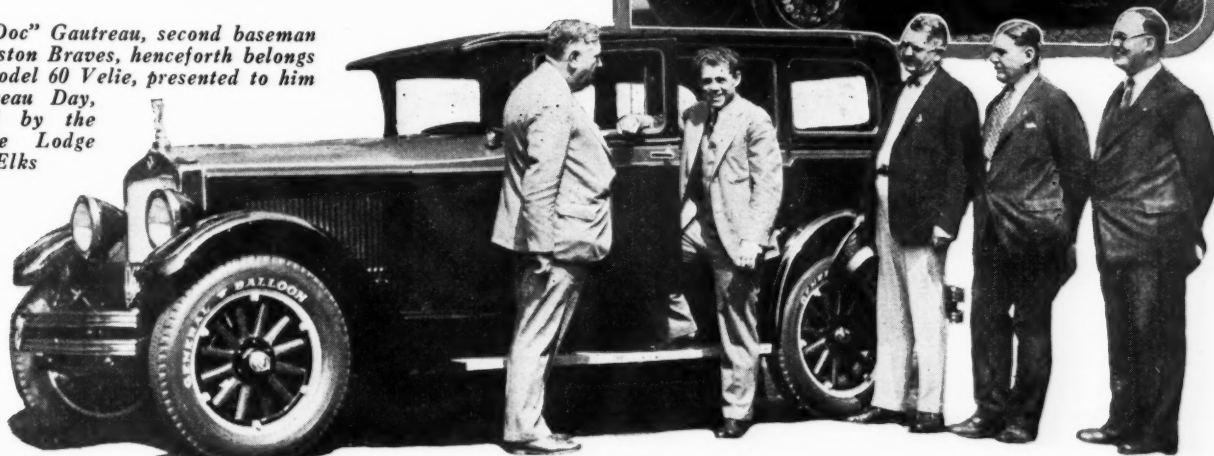


Left is the Oakland Six which won five awards in recent competitions in Paris. If you think the lady is an actress you are altogether right.



The Erskine, at right, recently won first prize in a skill test held by leading German automobile clubs in Hamburg, and also took honors in the flower parade preceding the contest

Walter "Doc" Gautreau, second baseman of the Boston Braves, henceforth belongs to this Model 60 Velie, presented to him on Gautreau Day, sponsored by the Cambridge Lodge of Elks



# When Winter Comes Let's Get

*The Melancholy Days Are Best in Which to Enjoy a Good Sleep,  
and We Must Have a Healthy Snooze if the Winter Sales  
Slump Tradition is to Be Preserved. Here's the  
Preserving Recipe*

**O**H for the good old days, when this automobile business entered a period of hibernation the first week in October, came out of its hole temporarily for the annual show, and then ducked back again until the first blades of grass began to appear in the spring.

Them was the days when a fellow in this business could laugh at his hard-working brethren in other lines—the days of the winter slump.

We didn't make much money. But what a fine long undisturbed rest we had.

We could sit in our salesroom or service station all day long, twiddling our thumbs and thinking. Sometimes we only twiddled our thumbs.

Nobody came in. Nobody went out.

The only excitement of the week was on Saturday morning, when the postman brought our copy of MOTOR AGE.

Those good old days seem to have gone forever now, and it was this same MOTOR AGE that had much to do with their going.

The old book seemed to feel that its standing as the oldest weekly in the industry gave it the privilege of sticking its nose into all corners of the business, of stirring things up and of starting something.

Some years ago it started a campaign to straighten the curve of the year's business, thus eliminating the delightful winter slump. We all laughed at it at first. "We have always had a winter slump and we always will have it, thank God," we said in our wisdom.

But, first thing we knew, little by little we were losing our leisure moments one by one. Today, we have to work just as hard in the winter months as we do the rest of the year. And there is no longer that very deep belly in the business curve.

A certain sage once remarked that the concept of hard work is essentially abhorrent to the human complex. Translated into United States, that sage observation means that, deep down in our hearts, none of us likes to work.

So we yearn for the return of those wonderful winters when there was no work to do in this business. How can we bring about a revival of those halcyon days?

Since it was instrumental in depriving us of our ease and comfort, what could be fairer than to ask MOTOR AGE to prescribe ways and means to produce a recrudescence of the annual winter slump?

MOTOR AGE, as usual, is willing to oblige.

It offers you 25 "Don'ts."

If you heed them, you will have plenty of time this winter to twiddle your thumb and think—or merely twiddle your thumbs without thinking.

Here they are. Study them closely.

1. Don't ask people to buy. You have no idea how many people are only waiting for you—or one of your

competitors—to ask them.

2. Don't feature new models or winter accessories in your show window. Someone is sure to see a car or an accessory he would like to own. You can relieve yourself of this particular annoyance by allowing your windows to remain unwashed during the winter. If they get dirty enough, passersby will not know what your business is, and you will be safe from intrusion.

3. Don't hold an autumn or winter salon. These stunts almost invariably attract visitors to your salesroom. Once in, it is sometimes hard to prevent them from buying something before you get rid of them.

4. Don't make any effort to sell tire chains. If their cars are equipped with tire chains, your customers will drive all winter, and it is almost a certainty that they will be stopping at your place, from time to time, for gas or oil or service.

5. Don't urge your closed-car customers to have the broken glass in their windows replaced. See No. 4.

6. Don't urge your open-car customers to have their side curtains repaired or replaced. See No. 4.

7. Don't stock radiator shutters, radiator covers and hood covers. If you don't have them, you won't be annoyed by people wanting to buy them. You can wish all that annoyance on your competitors.

8. Don't try to sell car heaters to owners of cars not equipped with them. Why go out of your way to make them comfortable? If they like the cold, let 'em freeze.

9. Don't try to get repaint jobs for your shop. Your painters need a winter rest as much as you do.

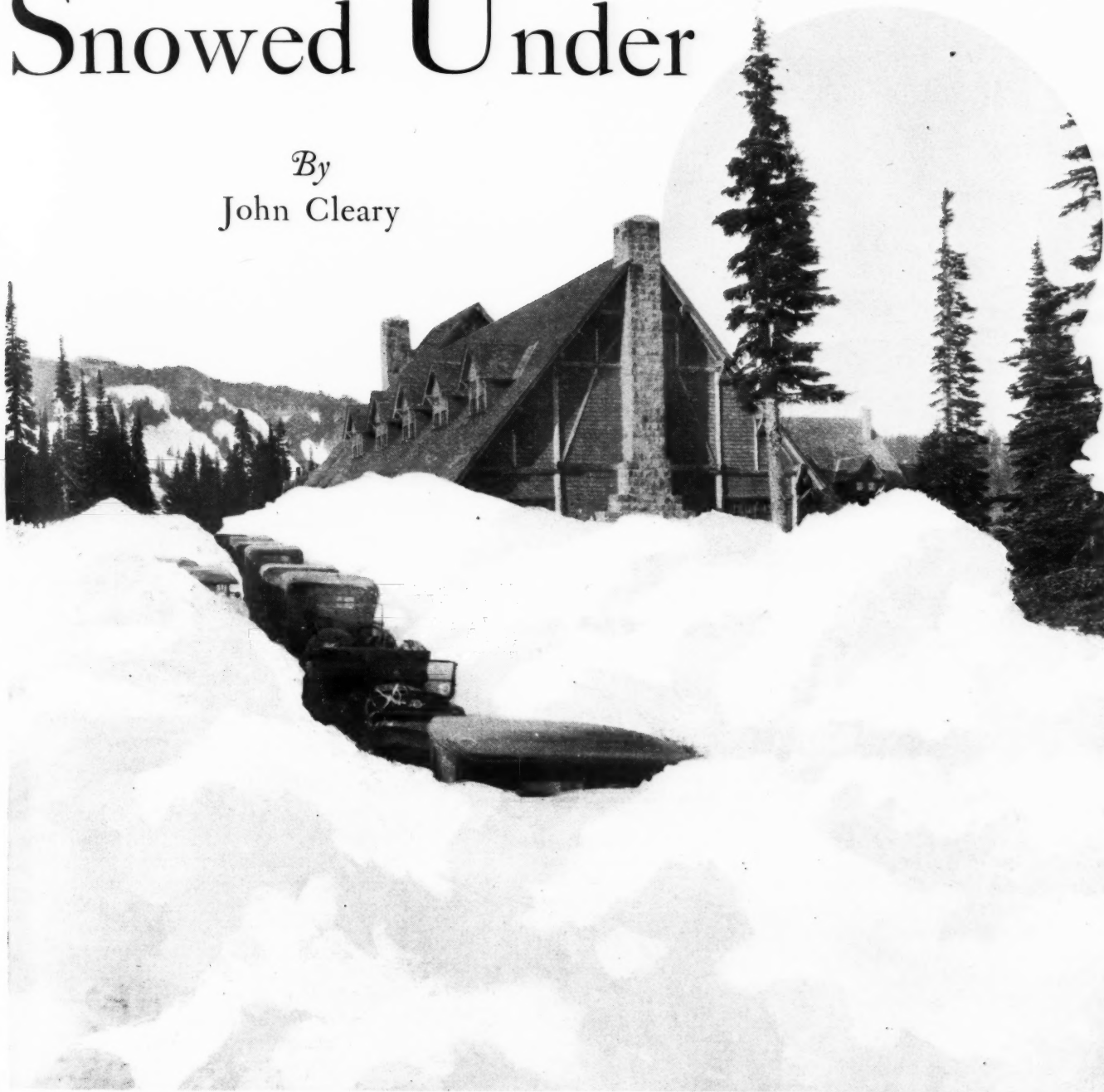
10. Don't burden yourself with worries about your customers's headlights. If an approaching motorist cannot guess which side of the car the good light is on, that's his funeral.

11. Don't adjust the generators in your customers' cars. If you do, those cars are almost sure to start and to have ample current for winter service. That means their owners are likely to come around any time



# Snowed Under

By  
John Cleary



and force money on you for parts and accessory purchases or minor repairs.

12. Don't warn your owners to put anti-freeze in their radiators. If you do, you will be required to stock a supply of alcohol and some of the advertised anti-freeze compounds. Then you will be put to a lot of exertion filling your customers' orders.

13. Don't advise your customers to change to winter lubricants. If you do that, how will your repair shop worry along next spring without the burned-out rear-end bearings and other jobs that you get every March or April?

14. Don't bother your customers with letters about the winter care of their batteries. A lot of them will take you seriously and clutter up your shop with battery jobs.

15. Don't—in other words—bestir yourself to do anything calculated to keep your customers' cars running. What right have they to encroach on your somnolence?

16. Don't clean up or prepare your used cars for sale.

You might be out of used cars in the spring. What would you do then?

17. Don't operate on flat rates for customers and mechanics. Flat rates attract too many customers and offer too much inducement to mechanics to solicit repair work.

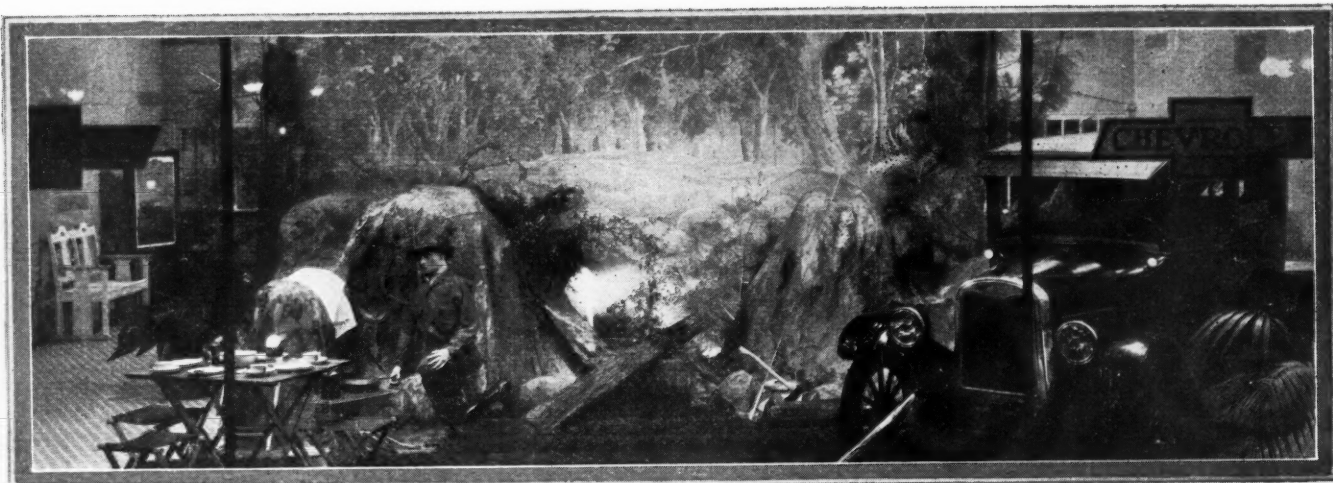
18. Don't concern yourself with your accounting system or your bank account. Those disagreeable features of business can be forgotten until spring, tra la.

19. Don't mail Thanksgiving, Christmas and New Year cards to your customers and prospects. They might appreciate your sentiments. Some of them might come in to thank you and, while they are in your place, might buy something.

20. Don't commercialize a holy season by joining in the movement to "give him something for his car at Christmas." During the last several years this single merchandising stunt alone created the sale of millions of dollars' worth of accessories and equipment. Think

(Turn to page 36, please)





# Let's Have a Show Down on Show

By George T. Hook

IF dust, circus lithographs and theatre placards were automotive commodities a great many of the display windows we see from day to day would be considered masterpieces of the window dresser's craft. And the observant reader will admit that there is more truth than sarcasm in this statement.

Successful establishments have proved beyond all argument that attractive show windows are assets whose worth they cannot begin to estimate in dollars and cents. Results convince, so that if you ask a five-and-ten store manager why he's having a run on galvanized iron buckets he won't refer you to a display window whose only adornment is a viscous piece of flypaper with its multitude of pestiferous occupants *hors de combat*; he'll point out a window full of the pail things with a gesture signifying "what more need be said?"

Such proof of the value of good display windows is an everyday occurrence in progressive communities, and you can't turn up your nose at it without subjecting yourself to the suspicious scrutiny of men who hitherto had had no cause for doubting the soundness of your judgment.

Yet, proof or no proof, the lamentable fact remains to haunt us that in the automotive retail trade today there are scores upon scores of merchants who are blind to the opportunity of increased volume and profits

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A Scientist Has  
Stated That  
82  
Per Cent of  
the  
Impressions Which  
Influence  
the Actions of  
People  
Are Received  
Through  
the Eye.  
That's Proof  
That  
Every Member of  
the Automotive  
Retail Trade  
Should  
Strive to Make  
His Window  
the  
Apple  
of His Eye

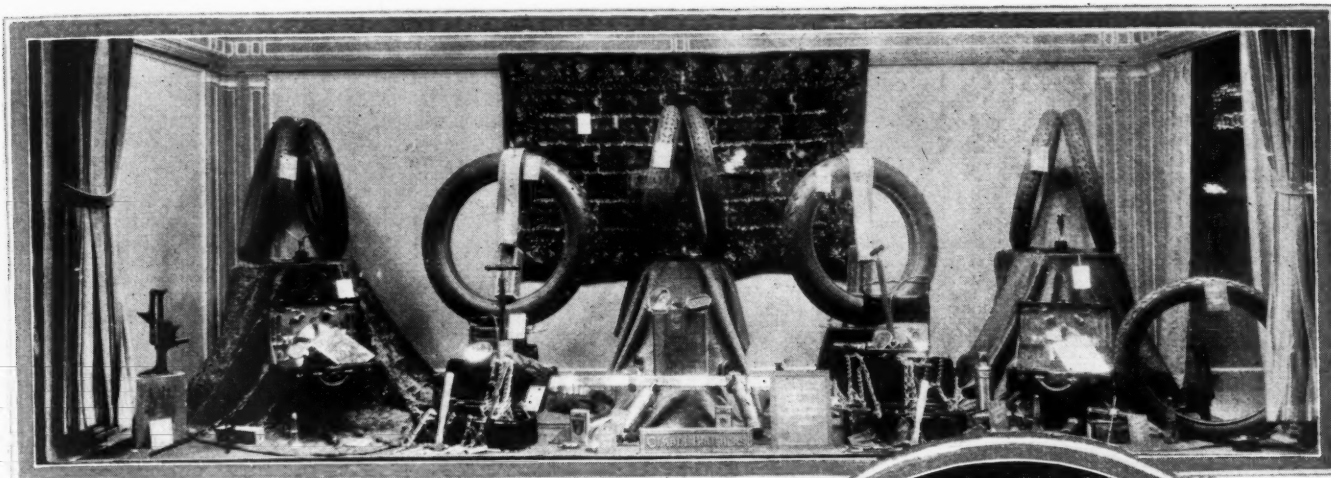
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they are passing up. This is not to say that they are in a class with proboscis elevators; rather, they fail to measure potentialities either because of negligence or because of incompetence. Neither is excusable, and hence this show down on show windows.

A moment of thought just now served to recall an enlightening incident which may influence us to qualify the statement in the second paragraph that "attractive show windows are assets whose worth they (successful establishments) cannot begin to estimate in dollars and cents." The remembered occurrence made possible the placing of an accurate valuation on a particular firm's display window, and to prove this story isn't the offspring of a cocaine spree we shall mention the name of the concern involved.

Gallagher Auto Service had a number of small buildings grouped on a Chicago side street a few doors off

Michigan Boulevard, which, it is well known, is one of the busiest motor thoroughfares west of New York. The city solons (then not so concerned with crime as now) decided to widen Michigan Boulevard by chopping off a few buildings from one side of the street. Thus it came about that one morning Gallagher found one of his almost windowless old brick structures with its sidewalk acting as frontage to endless processions of automobiles and people. Gallagher was wise and made quick to get a half-Nelson on the opportunity which



*On the page opposite is an arresting vacation window. Returns proved it was worth the effort and expense. Any one of the five groupings in the window above will serve as an attractive tire display*

# Windows

knocked on the door of his shop. With all possible haste he put in a large display window and dressed it with taste and appeal.

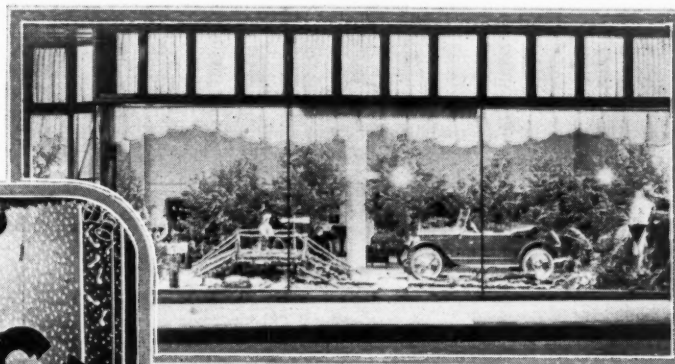
What happened was, at the time, rightly dubbed a "Miracle of Display."

The cash register, previously only a part-time worker, commenced playing sweet music such as would lure the most frugal Scot to philanthropy. It was r-r-ing! r-r-ing! r-r-ing! from morning until midnight. Accessory and supply sales, in truth, in the first fortnight averaged about \$350 a day.

This miracle made a powerful impression upon Gallagher but subsequent events indelibly engraved



*Nature helped with this Turkey Day window*



*With the help of a handy mechanic and a few trees the display above was born. The Yuletide window at left tells its own story of simplicity*



upon his consciousness the value of display. Over these events Gallagher had no control.

In widening the boulevard a strip of property five feet wide and extending the frontage of the Gallagher building had been left between his property and the street. There was some tangled litigation concerning it and, hardest of hard luck for Gallagher, an advertising com-

*(Turn to page 37, please)*



# Proper Accounting is Dealers' Big Need

*President of General Motors Corp. Tells Automobile Editors  
That Success of Accounting Division Will be Com-  
pany's Greatest Achievement. Discusses  
Relative Position of G. M. and Ford*

By Alfred P. Sloan, Jr.\*

**Y**OU of course appreciate that this industry of ours—the automotive industry is today the greatest industry in the world. Three or four years ago it passed, in volume, steel and steel products, the next largest industry. This means, expressed otherwise, that upon its prosperity depends the prosperity of many millions of our citizens and the degree to which it has become stabilized in turn has a tremendous influence on the stabilization of industry as a whole, and therefore the prosperity and happiness of still many more of our citizens. Directly and indirectly, this industry distributes hundreds and hundreds of millions of dollars annually to those who are connected with it, directly and indirectly, as workers. It also distributes hundreds of millions of dollars in the aggregate, to those who have invested in its securities. The purchasing power of this total aggregation, as you must appreciate, is something tremendous.

I believe that if you ask many of your readers as to the present position of the automotive industry, they would tell you that it was growing by leaps and bounds. I believe further you would sense a certain amount of uncertainty as to what was going to happen in the industry when the so-called state of saturation was reached. I do not know whether you appreciate it or not, but as a matter of fact, the industry has not grown very much during the past three or four years. It is practically stabilized at the present time. What has taken place is a shift of business from one manufacturer to another and the announcements in the press as well

\*EXCERPTS from an address delivered by Mr. Sloan to editors of American news and industrial papers at General Motors Proving Ground at Milford, Mich., on Sept. 28, 1927.

as the general publicity work of those manufacturers who have succeeded in increasing their business gives, I think, the impression that that is true of the whole business.

If we could assume, for the sake of argument, that we will reach the point where twenty-five million cars and trucks will be registered in the United States—an assumption that from what we have accom-

plished so far is certainly perfectly reasonable—then I think we could safely say that the replacement demand, plus the export demand which will increase for many years yet, plus the normal growth, would amount to something like four to four and one-half million vehicles and would require a production of a number of cars equal to or greater than has yet been produced in any year in the history of the industry, so I do not think we really have much to worry about as to the future.

I am sure that I do not need to elaborate any further as to what the automotive industry consists; its important influence on the prosperity of the United States; the important influence that it has had in many other industries which contribute to its production necessities. General Motors is an important part of this great industry of ours and as my contribution to your visit with us, I would like to tell you in a brief way, something about General Motors; how we are thinking, what we are doing, and our ambitions for the future.

And I now come to the point where I want to outline to you what I believe to be a great weakness in the automotive industry today and what General Motors is try-

**M**ANY of our dealers," said Mr. Sloan, "and the same thing applies to dealers of other organizations, have good accounting systems. Many of them have indifferent ones and I regret to say that too large a percentage of them have practically no accounting systems at all. Many of those who have accounting systems, through lack of their being properly developed, are not able to effectively use them. In other words, they are not so developed that they give the dealer the facts about his business; where the leaks are; what he should do to improve his position. Uncertainty must be eliminated."





MOTOR AGE IMPRESSION - ALFRED P. SLOAN JR.  
President General Motors Corporation

***I**N my opinion, without hard work nothing real can be accomplished, no matter what the principles may be. It seems sometimes—each one of you has seen such cases—that results are accomplished without hard work, but I think you will agree with me that in the long run it does not work out that way. In any event, I hope that General Motors will never attempt that sort of experiment. Therefore, our principles completely expressed, as I see them and they apply to every other business as much as they do to that of General Motors, are—Get the facts; recognize the equalities of all concerned; realize the necessity of doing a better job every day; an open mind and **HARD WORK**. The last, gentlemen, is the most important of all. There is no short cut.—Alfred P. Sloan, Jr.*

## PROPER ACCOUNTING IS DEALERS' BIG NEED

ing to do to correct that weakness. I have stated frankly to General Motors dealers, in almost every city in the United States, that I was deeply concerned with the fact that many of them, even those that were carrying on in a reasonably efficient manner, were not making the return on their capital that they should. Right here let me say that so far as General Motors dealers are concerned, from what facts I have—I realize there has been much improvement during the past two or three years, but interested as the management of General Motors must be in every step, from the raw material to the ultimate consumer, and recognizing that this chain of circumstances is no stronger than its weakest link, I feel a great deal of uncertainty as to the operating position of our dealer organization as a whole. I hope that this feeling of uncertainty is unwarranted. I am sure that with a responsibility so great, all elements of uncertainty must be eliminated and that our dealers should know the facts about their operating position as clearly and as scientifically as I have outlined to you, we feel that we know the facts about General Motors operating position.

This brings us to *proper accounting*.

Many of our dealers, and the same thing applies to dealers of other organizations, have good accounting systems. Many of them have indifferent ones and I regret to say that too large a percentage of them have practically no accounting system at all. Many of those who have accounting systems, through lack of their being properly developed, are not able to effectively use them. In other words, they are not so developed that they give the dealer the facts about

### **Uncertainty Must be Eliminated**

his business; where the leaks are; what we should do to improve his position. As I said before, uncertainty must be eliminated. Uncertainty and efficiency are as far apart as the North Pole is from the South. If I could wave a magic wand over our dealer organization, with the result that every dealer could have a proper accounting system, could know the facts about his business and could intelligently deal with the many details incident to his business in an intelligent manner as a result thereof, I would be willing to pay for that accomplishment an enormous sum and I would be fully justified in doing so. It would be the best investment General Motors ever made.

We consider our dealers partners in our business. It is true they operate on their own account, but they are, nevertheless, partners in the sense that their prosperity is linked up with our prosperity, and all good partners should recognize the necessities of each other and should cooperate so that all weaknesses can be eliminated. This is exactly what General Motors is doing in this connection.

We have organized a subsidiary whose sole functions will be to establish proper accounting systems

**IF I could wave a magic wand over our dealer organization, with the result that every dealer could have a proper accounting system, could know the facts about his business and could intelligently deal with the many details incident to his business in an intelligent manner, as a result thereof, I would be willing to pay for that accomplishment an enormous sum and I would be fully justified in doing so. It would be the best investment General Motors ever made."**

wherever desired by our dealers. We will audit such accounts periodically in order that our dealers may have the assurance that their records are properly established and that the facts that come to them are facts rather than fiction. We feel that with the great amount of specific knowledge we have, involving all phases of the automotive business, and with an organization that specializes in this particular branch of accounting, with nothing else to think of, that we can, through evolution and with the co-operation of our dealers, place before them facts and figures that will indicate to them very clearly what they should do and what they should not do.

I do not think there is anything that will contribute more to our complete stabilization than an accomplishment of this kind. I do not think there is anything that will establish greater confidence in the minds of the banking interests whose cooperation we must have in carrying on.

Some time ago I saw it stated, and I believe it is absolutely correct, that if business, using that term in its broadest sense, was equipped with proper accounting, a very large percentage of the failures and losses incident to same could be eliminated. We hope to be able, in due course of time, to place before our dealers "bogeys" I might say, showing the proper relationship of each expense item to the business as a whole with the result that if a dealer will conduct his affairs along the lines that we can ultimately outline to him, he will, in a sense, take the straight and direct course to a reasonable and fair profit.

I have told my associates time and time again, that with this program of ours accomplished to the degree that I am hopeful that it can be accomplished, that it will be the greatest achievement in the history of General Motors Corp.

Every once in a while, my attention is called to items in the papers that you gentlemen are publishing—statements to the effect that this General Motors line or that General Motors line is going to be discontinued. That is unfair to your readers who have invested in those particular cars; it is unfair to the dealers handling those lines, and it is unfair to General Motors. It is unfair to you because you want to tell the facts. I will take a few minutes to tell you exactly what our policy is in this regard.

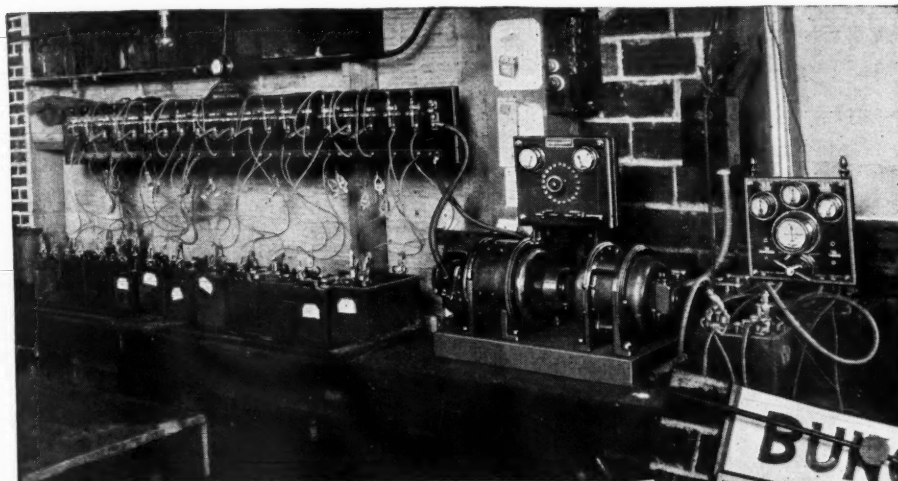
It is our hope and ambition to develop a complete line of motor cars from the low-priced group to the high-priced group within the limitations of reasonable quantity production. It is our hope and ambition to make each and every one of those lines of cars represent a greater value than anyone else can offer. It is our hope and ambition to so develop the confidence of the buying public in our policies and purposes, as to have it feel that whatever price car may be needed, the most

(Turn to page 42, please)

**Program is  
Seen as  
Best Ever**



# Does the Best Equipped Shop Get the Business?



*It Does if the Equipment is  
Properly Merchandised  
and Made to Act as  
a Salesman*

By

Leslie Weidenhoff,

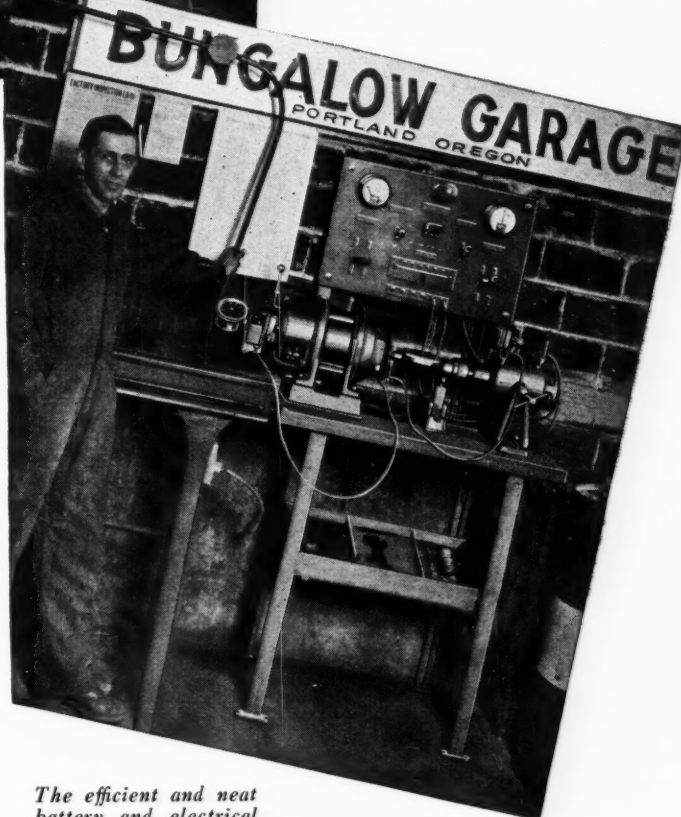
General Manager, Weidenhoff Products

JUST to have a well equipped shop is not realizing the full possibilities of the shop, for volume and profit. What such a shop will do for the public in a service way must be told in personal selling through direct-mail material and other forms of publicity, so that the full advertising value of a well-equipped shop can be turned into actual cash. Properly merchandised to the public, modern equipment can be made a business getter as well as a replacement parts and accessory salesman.

One of the best examples of merchandising equipment is that of the Bungalow Garage, 505 Williamette Boulevard, Portland, Ore., conducted by Elmer Perry, who has one of the most modernly equipped service stations in the Pacific Northwest.

After viewing the many units of equipment which Mr. Perry has installed, the first thought in one's mind would be "Is it really profitable to have so many units, entailing such an enormous investment," but Mr. Perry, who is a firm believer in his slogan of "Early to bed, early to rise, work like Hell and advertise," is equally proud and enthusiastic over his shop and his methods of merchandising, informing you that all of his equipment pays for itself, not alone in time and labor saving, but in the sale of replacement parts and new accessories.

As Mr. Perry takes you through his most elaborate and well arranged establishment, your attention is first directed to an instrument which is designed for use in determining any defects in the electrical system of the car. With this instrument the customer is shown the cause of the trouble, or to use Mr. Perry's words, "This gets me the job." Next is a large and modern electrical test bench, which shows the customer exactly what parts are defective, resulting in the sale of new replacement parts, and after a test here, the customer is convinced that the old parts cannot be used or repaired so "he can just get by."



*The efficient and neat  
battery and electrical  
equipment of the Bungalow  
Garage, Portland, Ore.*

"Since this test bench has been in my shop," says Mr. Perry, "I firmly believe the profit from the sale of generator and starter brushes, also ignition parts, armatures and coils, will more than offset my total investment."

One of his greatest merchandisers or "salesmen," as Mr. Perry terms his different units of equipment, is a battery tester which enables him to show a customer the exact condition of each cell of the battery, all at the same time, which convinces him of one of three things, namely, that his battery is defective and he

*(Turn to page 44, please)*



**L**ACK of man power is hindering many automobile dealers from making the progress they are entitled to.

This is a conclusion reached after three weeks' intensive study in the field of dealer problems and of steps necessary to correct them, in the course of which I travelled alone by motor through several states and covered 4000 miles calling on dealers in various-sized cities and towns, devoting most attention to the situation in the smaller centers. Stops were made at eight to 14 towns a day and from one to four dealers were visited at each place. The study also covered dealers handling lines other than Chrysler, and its primary purpose was to obtain a first-hand picture of actual conditions in the field.

Every place I turned I found a lack of man-power in both the sales and service departments of dealers. This was particularly true in the sales departments. Almost all agreed they didn't have enough salesmen and service men.

This business of being an automobile salesman has gotten to be a question, in many instances, of "How

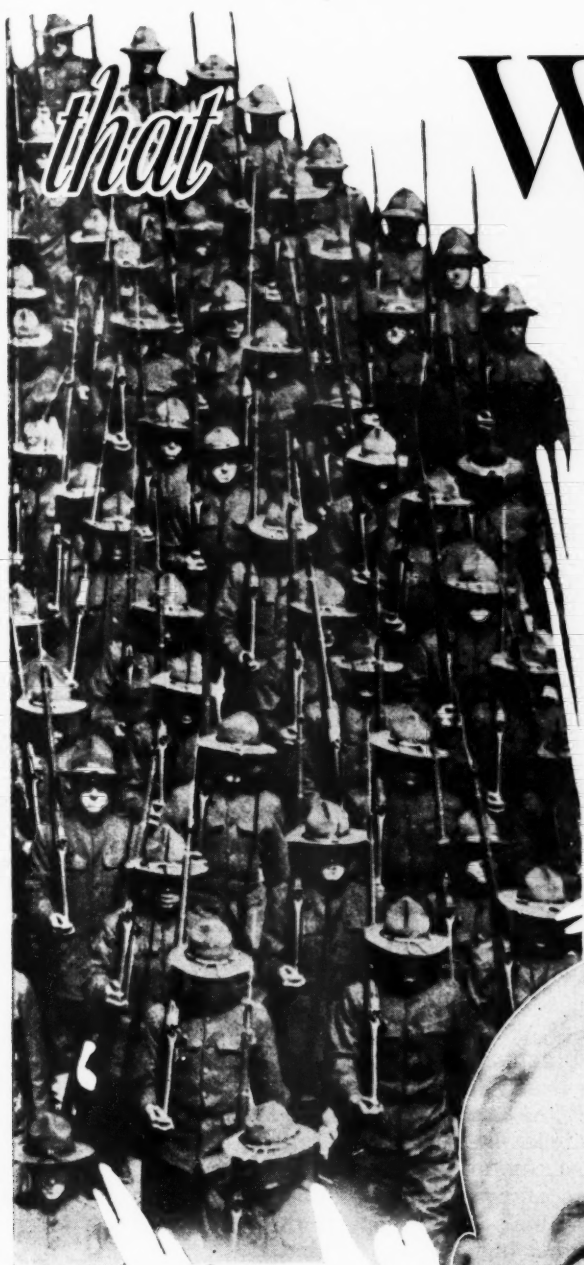
easy can I get by?" Dealers too often fail to sense the absolute necessity of developing real salesmen. This is no doubt the reason why there are so few really good salesmen in the industry today. Certainly some definite steps should be taken to improve this situation.

The complaint was often made that the desirable salesman who develops in a small town gravitates to the larger cities. Perhaps one reason for this is that the small town dealer does not show enough interest in helping or encouraging a good salesman to stay at home.

Everyone is looking for good salesmen. Good salesmen don't have to look for jobs. There is a big demand for them. It is no wonder then that the good salesman who develops in the smaller center is attracted to the larger cities. But when one stops to analyze the situation more carefully, there is, after all, perhaps more opportunity for the good salesman right at home, providing his present job is made attractive enough for him.

If it were possible to make a model salesman, it would, figuratively speaking, be possible to tool up and





# Wins Wars

*And It is Man Power That Automobile Dealers Must Have in Order to Make Progress and Attain Business Success*

By J. E. Fields

*Vice-president in Charge of Sales,  
Chrysler Sales Corp.*

*As told to Lewis C. Dibble*

mobiles is still another matter and the problem has to be approached entirely differently. As an example, if factories trained salesmen according to a certain formula and then turned them out to the dealer organization there would be such questions coming up as disagreements over compensation, division of prospects, etc.

My experience is that in every small town there are young men who want to progress. Usually they are the outstanding grocery clerk, hardware clerk or maybe machinery salesmen. Certainly there are enough of these men to furnish automobile dealers with a very favorable field of prospective salesmen, provided they are properly developed.

It seems to me the job is for everyone to start developing salesmen for himself. It must be admitted that because of different conditions existing in different localities, factories cannot recruit and educate salesmen for the individual dealer, hence the job of obtaining satisfactory salesman material is one of the problems for the dealer which goes with the business.

For some time we have been operating a service school very successfully. It has been held at the factory for nine months of the year while the other three months it has been taken into the field to provide its advantages for dealers in the more remote parts of the country. We have insisted that only key service men be sent to take the course. It has resulted in our dealers raising the standards of their service men, and the school will be continued.

We would like to do the same thing to assist dealers to further educate salesmen. I believe if dealers could select good men and

*J. E. Fields, vice-president in charge of sales of Chrysler Sales Corp., who recently made an extensive tour of dealer establishments and returned secure in the conviction which he expounds in this article*



jig up and produce him in the factory in any quantity desired, but in dealing with the human elements involved, and the various problems which exist in many communities, such an idea of course would not be practical.

I remember that back in the days when I was engaged in selling cash registers we operated along such lines and it worked, but selling auto-

# IT'S MAN POWER THAT WINS WARS

train them well for sales positions and later send them to a sales school to be conducted by the factory, that good salesmen would become more prevalent in the industry. Such a school could operate similar to our service course, being located at the factory for part of the year and later being taken into the field to reach the more distant points in the country.

Another thing which impressed me greatly was the lack of a true understanding by many dealers of their own business. This holds true especially in the smaller cities and towns. Unconsciously, I suppose, many small dealers are neglecting the very vital essentials which are necessary for the successful and profitable expansion of their business. As an example the untidy manner in which many dealers keep their offices, show rooms and service stations was strikingly noticeable. There were dozens of desks which were literally covered with old mail and trash of all sorts, in fact there were dealers who let their mail accumulate for two or three weeks before they opened any of it. Another common fault was that records were incomplete and books were poorly kept. These things I have mentioned are all simply essentials of any successful business. Then they wonder why they don't make money. To my mind many of the men in these cases I observed should not attempt to handle motor car sales.

Many men who are automobile dealers today rose from small garage operators or merchants in other lines. I do not say that they are all failures. Far from it. Many of them are our outstanding successes. But there are many who have not taken the time or trouble to learn the true requisites of an automobile dealer and furthermore they are not men naturally fitted for the work.

It would appear that if many of the men who are dealers today could make a fairly accurate survey of their business, they would find ways and means by which they could improve their opportunities. Along this line I believe there are countless dealers who would find it much more profitable to hire the services of another man to take care of much of the little details they now burden themselves with, and then apply this released energy to the more important phases of the business, such as developing a more efficient sales and service

organization. Then there is another angle which enters into the picture. There are many dealers who are not what one could call ambitious. Their sole aim seems to be satisfied if they are able to eke out an existence.

The trip revealed that there are a number of dealers who should be following other lines in the automobile business. For instance there is the man whose interest seems to lean strongly toward the garage end of the business. Then there is the chap whose interest runs to accessories and still another spends much of his time pumping gasoline. I realize full well that many of these side lines are absolutely necessary for the small town dealer to carry on, but what I am getting at is, that many of these dealers fail to analyze their own situation. They fail to figure out whether or not the things they are doing are more profitable to them than if they devoted more time to some other phases of their business. Their business, after all, should be based on: How much am I going to make, where am I getting to, and am I making progress?

Another significant thing which impressed me on this trip was the apparent progress dealers are making in handling the so-called used car problems. There were only three dealers who complained about any difficulty in handling used cars. This I thought was very remarkable. The dealer sometimes has felt prone to unload difficult problems on someone else, but now he has come to realize that the used car problem is his problem.

The dealer is learning by experience that the best way to handle the used car situation is to take in only desirable used cars. In other words he will not take in any car, but only cars which he has learned from experience can be sold readily. Today he stops to think what he will do with a used car after he gets it, and, if he is a good dealer, under no condition will he accept the used car which he knows will not move. This, to my mind, indicates clearly that dealers generally are grasping the problem at hand and in a thoroughly effective manner.

The automobile business is a good business. It has brought success and prosperity to countless dealers. It still offers many advantages to other dealers, if they will but visualize their opportunities and change their methods of doing business so that their operations are placed on a sound, business-like and profitable basis.

## When Winter Comes Let's Get Snowed Under

(Continued from page 27)

of all the work that involved, what with showing the goods, writing up the orders, delivering, collecting the cash and depositing it in the bank.

21. Don't use your telephone any more than you have to. If it rings, don't answer it, or answer with a growl. Sometimes orders involving a great deal of work are authorized over the telephone. If a man should order a car over the telephone, you would be put to the inconvenience of ordering one from the factory. And you know what a vexation that is.

22. Don't use a direct mail campaign. Postage stamps have done much to deprive people in the automobile business of their well-earned period of hibernation. If you do not care to be disturbed, the ideal plan is to refrain from writing letters entirely. Save your stamps.

23. Don't advertise. People spend more of their time at home in the winter. They have a greater inclination to read the newspapers thoroughly. They are thus more likely to see your advertising and be influenced by it.

The result will be that many of them will come to your store and you will have to wait on them. This will be especially true if you are undiscerning enough to put a winter appeal in your advertising.

24. Don't read MOTOR AGE. It is full of ideas and suggestions which, if you follow them, will keep you busy punching the cash register. Besides, MOTOR AGE is only publishing those ideas and suggestions because it wants its advertisers to get more and more repeat orders from you. They can't fool me.

25. Don't do anything that will cause you to lose one moment of the winter rest that is your right. Perfect quietude in the winter months was one of the *dolce far niente* features of the automobile business in the good old days. It is a tradition. And you and I must do what in us lies to cherish that tradition.

Move over.

Ho hum.

(Business of yawning). Curtain.



## LET'S HAVE A SHOW DOWN ON SHOW WINDOWS

(Continued from page 29)

pany erected a billboard on it, completely hiding the store.

Then it was that - Gallagher came to know the value of the display window with regard to business volume—sales dropped precipitately from around \$350 a day to \$9.

That ends the tale and in taking it you can dispense with the proverbial grain of condiment.

The lesson this true story teaches is that a great many automotive firms might as well have a signboard plastered across their display windows for all the benefit they derive from them.

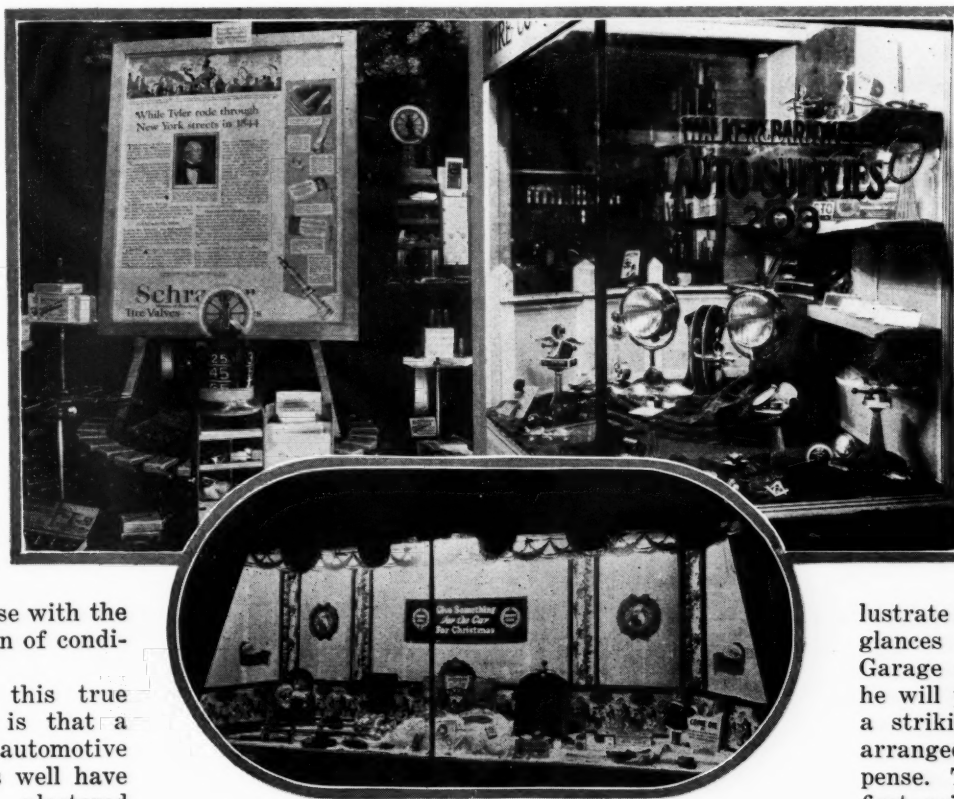
Quite a few of these firms seem incapable of comprehending that a poor display of wares in a window has no more drawing power than no display at all. Witness the store whose window contains a jack, a heat indicator and a stop light, standing one, two, three on faded crepe paper which the proprietor's wife would never tolerate in her china closet. And yet each week more people gaze at the store window and form their impressions of the establishment than will ever see the inside of the china closet.

Witness the store whose owner decides to turn over a new leaf by making proper use of his display space, gives his window a nifty dress and then leaves it to dust and to flies for a playground. It may be that he likes the appearance of his brainchild so greatly that he cannot bear to tear it down; it may be that he lacks the inspiration to conceive another. It may be that he's plain lazy. In any event his high resolve flops and drags along with it the effectiveness of the window.

Witness the store that clutters up its window with Grand Street abandon until it seems to contain more than the stock room.

The examples mentioned are not exaggerated instances of nose-thumbed opportunities. They are common, and are convincing evidence that if the sense of neatness and purpose is lacking the display performs very little more good than if it were dumped into the coal bin.

Strangely enough there are some retailers who have argued themselves into believing that good displays with frequent changes of dress are too costly. Cost, of course, must be judged on the basis of returns, and the retailer



Three good examples of special windows. The one in upper left evidently took advantage of a factory suggestion. Neatness of arrangement is a characteristic of all three displays

who doesn't experiment can't have much of a toehold for his argument. And if he needs to be convinced that attractive, effective, dressings can be achieved at moderate cost, he has only to put on his spectacles and run his eyes over the display windows that il-

lustrate this article. If he glances at the Vernon Garage Christmas layout he will perceive just how a striking effect can be arranged at very small expense. This window took first prize in one of the Automotive Equipment Association contests.

The Thanksgiving window is a particularly good example of frugality.

Nature furnished most of the setting gratis. Its greatest requirements were ingenuity and patience, which can't be considered overhead.

The car displays, with sylvan settings, demanded a greater monetary outlay but results in both cases justified the means to the end.

Who will dress the window? appears to be another obstacle detouring a goodly number of the smaller automotive retail concerns from the highway that terminates in more satisfactory success. In the average establishment of the class mentioned if the proprietor does not have the time or the inclination, it is quite likely that some employee will be found to embrace the responsibility and discharge it with credit. In window dressing experience he may be utterly callow but, given the task to perform, his development will be certain. He will observe the creations of experienced decorators, and by practice he will emerge capable, just as the patient young housewife develops into a culinary adept.

What if such raw material is not at hand? Well, there's the case of a dealer in accessories and supplies of our acquaintance who makes use of a clothing clerk who dresses the windows for his employer. The clerk, liking window dressing better than clerking (and this is true in a great many cases) was highly pleased to be given the chance to earn some extra money.

The merchant in a similar predicament is reminded that in his town he will not find it difficult to get a clerk of this type to do his windows as a side job at night. If the merchant gives him a window budget and

(Turn to page 44, please)

# Airplane Influence in Jordan

*Horsepower Increase of 33 Per Cent and Torque Increase of  
21 Attributed to Lighter Reciprocating Parts, Redesigned  
Combustion Chamber and New Type Carburetor.  
Electrical Equipment Now Auto-Lite*

WITH a maximum road speed in excess of 75 miles an hour—the limit depending on road conditions and body style—and yet with a minimum speed of 2 miles an hour in high gear the Jordan Air Line Eight is presented combining extreme performance and flexibility.

Such accomplishments were not made by the development of an enormous powerplant, as not a pound of weight has been added to the car in spite of greatly increased engine power. The improvements come directly from lessons learned by Jordan, Continental and Stromberg engineers from developments in the aviation engine industry.

While the rated horsepower has been increased only from 26.4 hp. to 28.9 hp. the actual brake horsepower is now 80 at 3200 r.p.m. as compared to 64 hp. at 3000 on the Jordan Line Eight. This 33 per cent added horsepower makes possible an acceleration of 5 to 40 miles an hour in 12½ seconds with a top speed of 52 miles an hour in second gear.

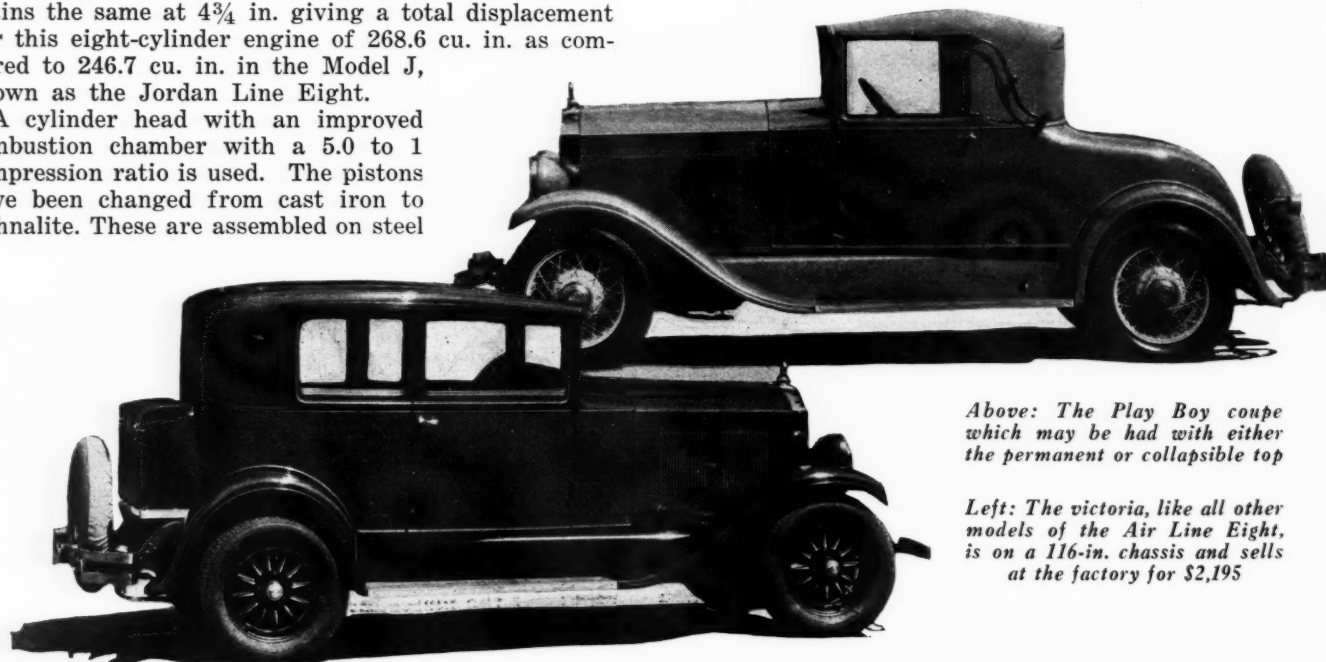
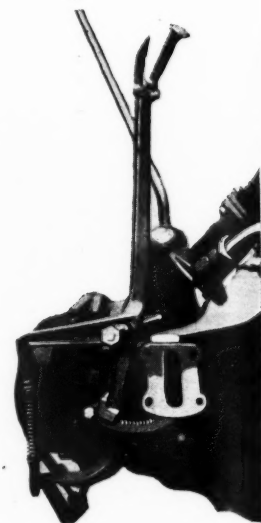
The bore has been slightly increased, it now being 3 in. instead of the previous 2⅞ in. The stroke remains the same at 4¾ in. giving a total displacement for this eight-cylinder engine of 268.6 cu. in. as compared to 246.7 cu. in. in the Model J, known as the Jordan Line Eight.

A cylinder head with an improved combustion chamber with a 5.0 to 1 compression ratio is used. The pistons have been changed from cast iron to Bohnalite. These are assembled on steel

connecting rods which measure 9¾ in. from center to center and which have their babbitt bearings integral. The piston pins are 55/64 in. in diameter by 2 25/64 in. long and are carried on bronze bushings and float in the piston.

The crankshaft is machined all over and is carried on 5 main bearings, all 2⅝ in. in diameter. The rear main bearing is 2½ in. long while the length of each of the others is 1⅜ in. The connecting rod bearings are 2¼ in. in diameter by 1 5/16 in. long. The extremely fine static and dynamic balance of the crankshaft accounts in no small way for the higher speeds and greater power of this engine to say nothing of the smoother riding qualities and greater engine life.

The 1⅜ in. diameter inlet and the 1¼ in. diameter exhaust valves are of special alloy steel and are located on the right side of the engine and have 45 degree



*Above: The Play Boy coupe which may be had with either the permanent or collapsible top*

*Left: The victoria, like all other models of the Air Line Eight, is on a 116-in. chassis and sells at the factory for \$2,195*

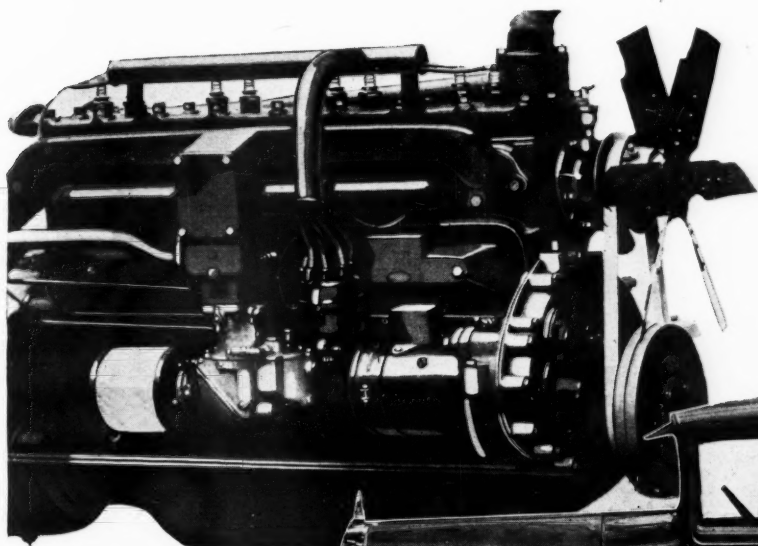


# n Air Line Eight

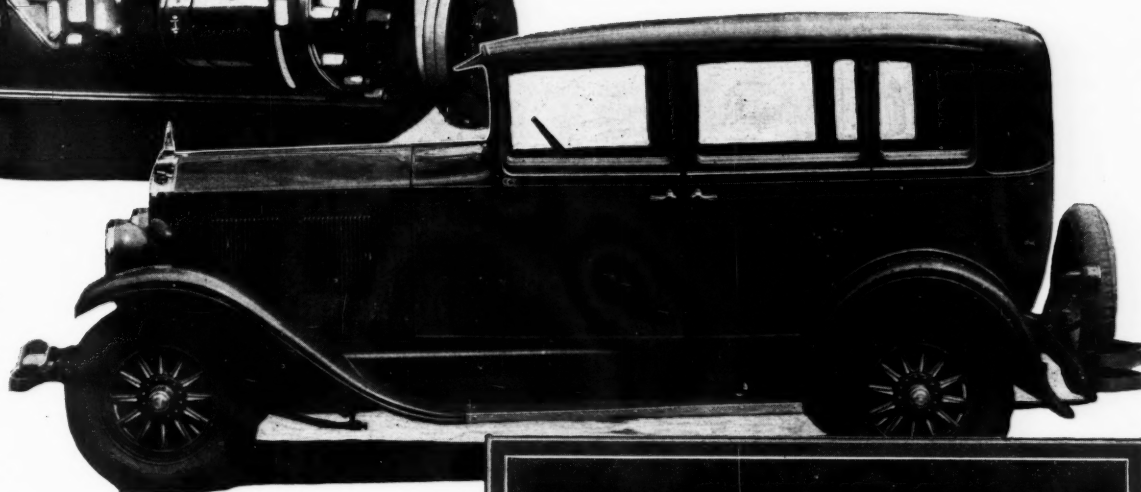
By C. Edward Packer



*Below: The Air Line Eight five-passenger, four-door sedan*



*The right side of the Air Line Eight engine showing the double carburetor, and new type manifold*

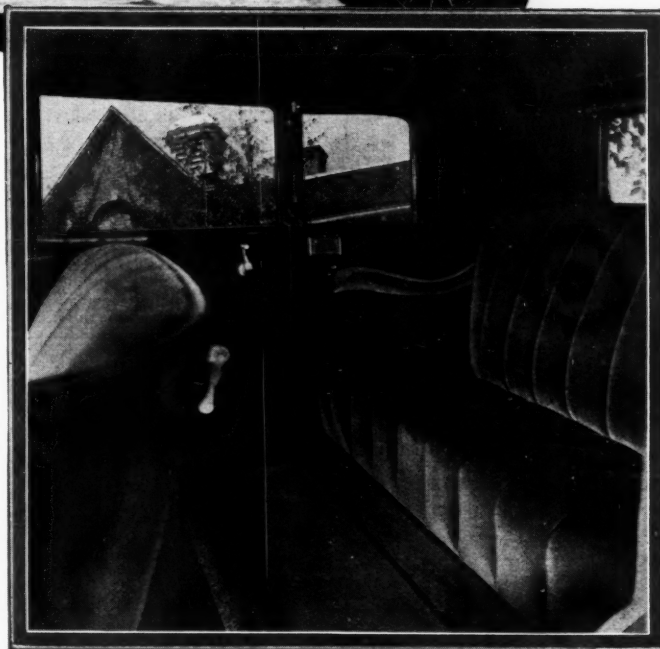


seats. Their lift is 5/16 in. Mushroom type steel tappets are actuated by the one piece drop forged camshaft which is carried on 5 bearings. A No. 45 Morse chain drives this shaft as well as the distributor and generator, the latter being swung out to take up chain slack.

The Stromberg model 002 carburetor—which is in effect two carburetors working from one bowl—is a direct copy of aviation carburetors but adapted for automobile use. This incorporates a separate two-hole idler which takes care of the engine at low speed. Another feature is the accelerating well in which a supply of gasoline is stored to assure a fast pick-up. There are two venturi tubes which assist in turbulating the mixture thereby providing a highly homogeneous mixture.

By providing a separate means for idling and accelerating, the ordinary running mixture of the carburetor is not interfered with in any way which results in the most economical engine operation. An entirely new development is the thermostatic control in this carburetor which automatically compensates for changes in weather or altitude and entirely does away with the need of carburetor adjustments.

The double type carburetor is connected to the engine by a divided intake manifold—one side of the carburetor supplying cylinders 1, 2, 7 and 8 while the other side furnishes fuel to cylinders 3, 4, 5 and 6. The air supply to the carburetor is not heated but is filtered



*The luxurious interior of this Jordan Air Line Eight sedan is typical of all of the new models*

through an air maze type of air cleaner. The only heat applied to the incoming charge is supplied by the ex-

## AIRPLANE INFLUENCE IN JORDAN AIR LINE EIGHT

haust which circulates around the intake manifold immediately above the carburetor. Circulation is assured by means of a system which takes exhaust gases directly from the engine and after circulating them around the intake manifold, discharges them into the exhaust pipe by a syphoning action.

The electrical units include Auto-Lite ignition, starter and generator, and a Willard thread rubber insulated battery. The starting motor cranks the engine through a Bendix drive. The total reduction is 22 to 1. The generator, which is of typical third brush design is set to charge between 13 and 15 amp. when cold.

The Auto-Lite ignition unit combines manual and automatic advance. The timing provides for the spark with the manual control in the fully advanced position  $1\frac{1}{2}$  in. on the fly-wheel before dead center. The automatic advance provides 24 deg. of advance which combined with the manual advance of 15 deg. gives a total of 39 deg. The firing order is 1-6-2-5-8-3-7-4.

Valve timing is as follows:

Exhaust closes 8 deg. past upper dead center.

Intake opens 8 deg. past upper dead center.

Intake closes 40 deg. past lower dead center.

Exhaust opens 40 deg. before lower dead center.

The lubrication system supplies oil under pressure to main, connecting rod, and cam bearings, and sends a positive flow to the timing chain and accessory shaft bearings. Lubrication of the pistons and pins is by oil thrown from the crank pins while a heavy oil mist lubricates the valves and tappets. The capacity of the system is 10 quarts, while 8 quarts is used for a refill.

The cooling system holds  $4\frac{1}{4}$  gals. circulated by a pump which is driven by the fan belt. A six-blade 18-in. fan draws an abundance of air through the cellular radiator assuring adequate cooling at all times.

The head lamps which are of the "Tilt Ray" variety are controlled by a Kellogg switch conveniently located on the steering column directly under the wheel. These lamps use 21 c.p. bulbs with 6 c.p. bulbs for parking.

All lamps are of the single contact variety.

These cars are locked with a Hershey coincidental ignition and steering column locks mounted at the junction of the instrument board and steering column.

A single plate clutch and a three-speed and reverse selective transmission are used. The transmission uses annular ball bearings except on the countershaft where Hyatt roller bearings are employed. The same type of bearing is also used in the clutch pilot.

A Spicer tubular propeller shaft of  $1\frac{3}{4}$  in. diameter, carefully made to prevent whipping, connects the transmission with the Timken rear axle through two universals. This is of the semi-floating, spiral bevel gear type. The pinion is carried on three bearings while two bearings are found at each wheel. The differential is of the four-pinion type. Reductions of 4  $\frac{1}{11}$  and 4  $\frac{5}{11}$  to 1 are offered.

Hotchkiss final drive is used, the propulsion and torque being handled by the chrome vanadium semi-elliptic rear springs which are 2 in. wide and  $55\frac{3}{4}$  in. long.

The service brakes are of the hydraulic external contracting type acting on all four wheels through brake drums  $14\frac{3}{4}$  in. in diameter by 2 in. wide. The emergency or parking brake, operated by the hand lever, is 8 in. in diameter by  $2\frac{1}{2}$  in. wide and is located behind the transmission. A worm and roller type steering gear operates in connection with a Timken front axle. The reduction has been increased from  $11\frac{1}{2}$  to 1 to 18 to 1. All steeling gear bearings are adjustable for wear. A 17 in. steering wheel with walnut spider is used. The wheel base is 116 in. A 17-gal. gasoline tank is carried at the rear. Lubrication is by Alemite fittings.

Equipment includes Moto Meter, electric gasoline gage, electric clock, combination stop and tail light, Houdaille shock absorbers, Fedco numbering plate system, cowl ventilator and adjustable windshield, combination ignition and steering wheel lock, vanity cases and smoking sets in the sedan and Victoria, also trunk on the latter, and many other items.

### The complete line of Jordan is now as follows:

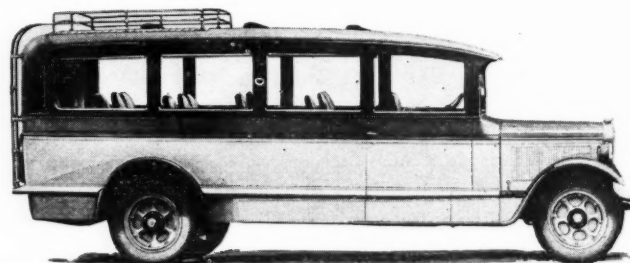
Model "R"	Price
4 p. Blue Boy .....	\$1,745
4 p. sport salon .....	1,595
2-4 p. Tomboy .....	1,595
5 p. sedan .....	1,595
"J-1"	
4 p. Playboy .....	1,545
2-4 p. sport coupe .....	1,695
5 p. custom sedan .....	1,695
4 p. custom victoria .....	1,695
"JE" (Airline)	
5 p. sedan .....	2,195
5 p. victoria .....	2,195
4 p. collap. coupe .....	2,195
4 p. perm. coupe .....	2,195
"AA"	
2-4 p. Playboy .....	2,345
2-4 p. sport coupe .....	2,495
4 p. custom victoria .....	2,495
5 p. custom sedan .....	2,495

### Standard Wiring Manual

THE interesting facts used in the articles on "The Adjustment of High Speed Delco-Remy Distributors," and "The What and Why of Split Field Generators," which have appeared in recent issues of MOTOR AGE, were supplied through the courtesy of The Standard Engineering & Publishing Co., 241 Belmont St., Belmont 78, Boston, Mass.

This material is a feature of the Standard Auto-Electrician's Manual published and sold by the Standard Engineering & Publishing Co. This manual completely covers the wiring of American-made cars. A distinctive feature of the book is the practical service data which supplement the wiring diagrams. Due to the substantial loose-leaf binding the book stands up well in the shop and can readily be kept up-to-date.

### New Graham Parlor Coach



This new 16-passenger Graham Brothers' parlor coach supersedes the former four-cylinder Model JB. It has a six-cylinder engine, four-speed transmission and Lockheed hydraulic brakes. It lists at \$4,290



# Last Chance to Vote!

*The Big Popularity Contest is Within Striking Distance of the Finish. No More Coupons Will Appear in Motor Age After This Issue. Are You Helping Some Good Wholesale Salesman to a Position in the Hall of Fame?*

In the *Motor World Wholesale* popularity contest for wholesale salesmen twenty-seven candidates will be elected to divide \$2,075.00 in cash.

If you haven't clipped and used the vote coupons which have appeared in all issues of *MOTOR AGE* since June 30 you are urged to go back in your files, clip all coupons, fill them in with the name of your favorite jobber salesman and mail them to the Contest Editor of *Motor World Wholesale*.

**Contest ends at 12 o'clock noon, Oct. 15.**

After the stroke of twelve on that date no votes will be received and counted.

The \$2,075.00 cash award will go to twenty-seven jobber salesmen—three in each of the nine trading zones in the United States.

The man in each zone who receives the greatest vote will be awarded \$100.00. Second prizes will be \$50.00 each and the third prizes will be \$25.00 each.

A special prize of \$500.00 will go to the zone first honor winner who receives the greatest number of votes of all candidates. Hence this man will get the special prize of \$500.00, his zone first prize of \$100.00, and also win the distinction of national championship in the contest for popularity and efficiency.

Although the contest will be open until Oct. 15 there will be no vote coupon in next week's issue of *Motor Age* (Oct. 13) for the reason that delivery of the publication to subscribers in the western zones will not be made until after the contest will have closed.

**Hence here is your last chance to vote. Use the coupon.**

And if you haven't used all coupons since the June 30 issue we urge that you go back in your files,

cut them, fill them in and forward them promptly to the Contest Editor of *Motor World Wholesale*.

As the contest stands at this writing it is anyone's race.

We couldn't hazard a guess as to the probable zone winners, or who will be elected to receive the Grand Prize and the honor of national champion.

The race grows in interest day by day. Thousands of votes from all parts of the country demonstrate that *MOTOR AGE* subscribers are taking a lively interest in wanting their respective candidates to be within the money.

The twenty-seven men who carry off the prizes will win more than money. They will emerge with honor and distinction. And the automotive world will know who, in the ranks of wholesale salesmen, are rated by the nation's retailers as the twenty-seven most popular and efficient.

*Make this coupon work*

## MOTOR WORLD WHOLESALE Popularity Contest for Wholesale Salesmen

Contest Editor  
Motor World Wholesale  
Chestnut and 56th Sts., Philadelphia

In the wholesale automotive salesmen's popularity and efficiency contest I vote for:

Name of salesman .....

Name of his firm .....

His firm's address .....

Your signature .....

Your firm name .....

Address .....

M. A., October 6—This ballot is for ONE vote.

## PROPER ACCOUNTING IS DEALERS' BIG NEED

(Continued from page 32)

outstanding value, from every standpoint, is in the General Motors line. Much has been accomplished in that direction, but no one appreciates more than I do that much more can and will be accomplished. It was in the development of this program that we added the Pontiac and it was also in the development of the same program that we added the LaSalle. Should we feel that our line of cars at any time is, for any reason, incomplete, we will add other lines to the end that, as I said before, from the highest price group to the low price group there is a General Motors car with reasonable difference in price, to fit the purse and purpose of all and they will all be quality cars—you may be sure of that. We will never make the fatal mistake of sacrificing quality for price. All that I have said before means, expressed otherwise, that there is no possibility or probability of any of the present lines being discontinued. On the other hand, they will be expanded and improved and made more effective and more efficient as the ability of the General Motors organization makes possible.

As a result of the above policy, we have already made substantial progress; we have increased the proportion of General Motors new cars registered in the United States from one in six to better than one in three. We have increased our retail sales during the past three years to the point where, this year, we expect to sell at retail, in excess of one and one-half million motor cars. We have expanded our business in volume during the past three years to over \$1,000,000,000 annually. Our organization recognizes that there is much to be accomplished, and I am sure that it will be accomplished. We are on our way.

### *Relative Position of Ford and G. M.*

Now, while I am speaking of General Motors position in the industry, I am reminded of the fact that many of our newspapers and magazines seem to be devoting more or less space to a discussion of the relative position of General Motors and Ford as important factors in the automotive industry, their present relation and their future relation.

Now, I have tried to consider the question from all sides, and it seems to me it is not such a complicated problem as it is made out to be. I have been in the automotive industry from the beginning. As a matter of fact, I might almost say I was in it before the beginning, and that reminds me of a rather interesting incident.

As the industry was just starting I was in the manufacturing business in the East. We had a product, the Hyatt roller bearing, which was applicable to the motor car and we had supplied some of our product to many experimental vehicles. It is hard to appreciate it now, but at that time anyone experimenting with a motor car was looked upon almost in the same category as if they were trying to discover perpetual

**I**F the past is any indication of the future, the new Ford car will be a car that will appeal to a great mass of people. Naturally, the car must meet present conditions, but the basic idea is likely to be the same. General Motors is in quite a different position. General Motors' idea is to make a car of greater luxury than the Ford—a car that properly belongs to the next higher price class. With every price car there is a definite market. This applies to the Cadillac as well as it does the Ford."

motion. Finally, out of those experimental efforts came the starting of the industry. Many of you probably remember that our first job was to prove to the public that the cars would really run. The Automobile Shows came into the picture and in the earlier shows in the old Madison Square Garden in New York there was a track and the cars were operated around a track under their own power, the public looking on. The company I was with at that time had a small exhibit up in the balcony and all day long people came along who were thinking of going into the industry. Among them was Mr. Ford, and I not only made his acquaintance at that time, but succeeded in interesting him in our product. As a result of all this, Mr. Ford became our best customer. As a matter of fact, my start in life was greatly helped by the support that Mr. Ford gave our little business at that time. This brought me in close touch in those early days with Mr. Ford and his organization, their viewpoints and ambitions.

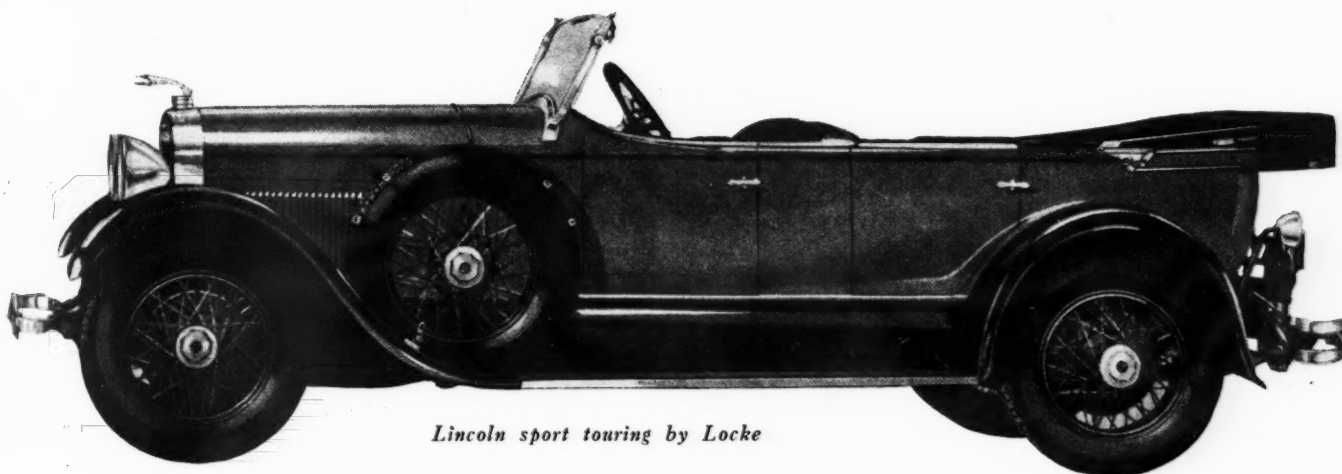
I, naturally, was trying to sell our product to all those who were going into the industry, and for some years after that it was a frequent occurrence to be shown designs or experimental models which were supposed to enter into competition with Ford, but the trouble was the people who had those models did not have the basic idea that Mr. Ford had; viz., the lowest possible price. I do not think many of us appreciate the tremendous debt that we owe Mr. Ford for not only his conception of the idea, but his sticking to it. Other people who had the idea did not stick to it—they permitted their cars to get more costly and therefore lost their position. I mention all this because the same thing applies, as I see it, to the situation at the present time. If the past is any indication of the future, the new Ford

car will be a car that will appeal to a great mass of people. Naturally, that car must meet present conditions, but the basic idea is likely to be the same. General Motors is in quite a different position. General Motors idea is to make a car of greater luxury than the Ford—a car that properly belongs to the next higher price class. With every price car there is a definite market. This applies to the Cadillac as well as it does to the Ford. Any manufacturer that will give to the public a definite number of dollars' worth of value, and do it constructively and honestly, will get a certain proportion of the market that belongs to that number of dollars. It is purely a question of giving the public honest value. There is plenty of opportunity in the world today for Mr. Ford to give the public honest value, which of course he will do, with the result that he will sell an enormous number of cars per year, and there is an equal opportunity for General Motors to give the public honest value at a higher price and likewise. sell

(Turn to page 44, please)

### *G. M.'s Aim is Car of Greater Luxury*





Lincoln sport touring by Locke

# Lincoln Bodies Lowered and Power Increased

*New Bore and Stroke of 3½ by 5 in. Gives a Piston Displacement of 385 cu. in. and Results in a N. A. C. C.*

*Horsepower Rating of 39.2*

**L**OWERED bodies and increased power feature changes made in Lincoln cars now in the hands of dealers. An increase in bore of ⅛ in. has resulted in increasing the power from 80 to 100 hp. With the new bore and stroke of 3½ x 5 in. the N.A.C.C. horsepower is increased to 39.2 while the piston displacement is 385 cu. in. as compared with 358 formerly. As a result of this change acceleration and top speed have been materially increased.

A 2-in. drop has been achieved in the bodies by the use of smaller wheels taking 32 x 6.75 balloon tires as compared with 33 x 6.75 formerly, and decreased camber of the springs.

The bodies remain virtually unchanged, however, although a new instrument panel has been incorporated in which the various instruments are centrally grouped and indirectly lighted. As formerly, the instrument board proper is of stainless steel without any surface coating.

A change has also been made in the name plate on the radiator shell consisting in the elimination of the word "Ford" from the emblem. This now has only the word, "Lincoln," in an oval.

A slight change has also

**W**HILE list prices of former Lincoln models are continued, several new custom body models have been added. These include the following:

MODEL	PRICE
Club roadster .....	\$4,600
2 p. coupe .....	5,000
Berline .....	5,500
Limousine .....	6,000
Brougham .....	6,400
6 p. Berline landaulet.....	6,500
Cabriolet .....	6,600
Le Baron cabriolet .....	7,000
Holbrook cabriolet .....	7,200
Collapsible cabriolet .....	7,300

been made in the fenders which are slightly wider and deeper than formerly to carry out the lines of the lowered bodies.

The 60 degree "V" cylinder arrangement is continued for the purpose of holding down vibration. This gives power impulses at intervals of 60 degrees and 120 degrees.

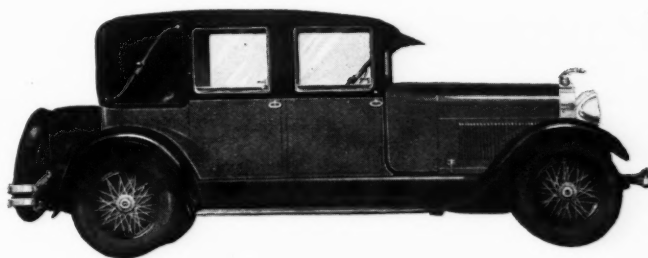
The clutch and gear set are of Lincoln design and manufacture and have not been changed in any way, experience having proved the ample factor of safety which will enable these parts to handle the increased engine power.

Having worked out satisfactorily in service the four-wheel mechanical brakes also remain unchanged.

The 10 body styles offered, plus anything of a custom nature that might be desired, cover the fine car field in a most thorough manner. Models in the custom line range from the

two-passenger club roadster at \$4,600 to the collapsible cabriolet at \$7,300.

Standard equipment continues as formerly and includes wood wheels, front and rear bumpers, hydraulic shock absorbers, spare tire and tire lock, automatic windshield wiper, dash gasoline gage, cigar lighter, rear traffic signal and clock.



*The Lincoln four-passenger, two-window sedan. The non-collapsible rear quarter permits ample vision*

## DOES THE BEST EQUIPPED SHOP GET THE BUSINESS?

(Continued from page 33)

needs a new battery, that one or more cells are defective and should be repaired, or that some defect exists in his electrical system. Mr. Perry claims that the first week this tester was put into service, the sale of new batteries offset its cost by a good margin.

In his battery and electrical department he operates the very latest type of battery charger, through the use of which he has effected a monthly saving of from 25 per cent to 40 per cent in current consumption, and his ability to take batteries "in at 8 and out at 4" has more than doubled his battery recharging business.

Getting into his mechanical and general repair department you find overhead trolleys, presses, lathes, cylinder grinders, hones, machines for cylinder re-boring and grinding, brake relining and valve refacing.

As Mr. Perry further explains, whenever a car owner drives into his garage a thorough inspection is made of the car. The electrical system, engine, brakes, steering apparatus, transmission and differential, are gone over. If a cylinder is throwing oil or the motor has a "knock" he tells his customer about it, shows him how he can have the cylinders rebored, with new pistons, wrist pins, rings and bushings installed without delay, and on account of his modern equipment at the least possible expense. Mr. Perry is frank to admit that his re-boring, valve refacing and brake lining machines have sold enough pistons, wrist pins, bushings, valves and brake lining to pay off the last mortgage on the building in which he is located.

In view of the location of Mr. Perry's garage, which is far from the main arteries of traffic, situated as it is in a strictly residential section of the city, overlooking the beautiful Columbia River, one wonders how it is

possible for him to have such a continuous stream of automobiles coming and going during every minute of the day.

Mr. Perry answers this by his appearance. He is in his conventional suit of overalls, and endeavors to meet every car owner personally, and sees that he leaves the establishment with more confidence in his ability to serve than he had when he first drove in. Moreover, Mr. Perry circularizes his trade every month. He holds clinics about twice a year at which time many of his customers attend and the salesmanager as well as a salesman from the local jobber with whom he deals, explains to the car owner how each piece of equipment is designed to show the defects, and to repair or test the defective parts in the least possible time and at a saving. Mr. Perry has found the car owner to be in a receptive mood for information regarding the upkeep of his car and that his customers tell their friends and bring them along so that today they look forward to these educational meetings, and his trade comes from all sections of his city and state. His up-to-date methods of merchandising his equipment and service have built for him a most enviable reputation.

Mr. Perry says "the well equipped shop does *not* get the business, unless it is merchandised and made to act as a salesman in bringing not only a profit from labor, but a net profit from the sale of new accessories and replacement parts, otherwise the service station just getting by today, will be passed by tomorrow."

Remember, if you don't become a merchandiser of your service, of your equipment, of replacement parts and new accessories, you are out of step with the trend of the industry and you will not show in any close-up of the industry a few years from now.

## Let's Have a Show Down on Show Windows

(Continued from page 37)

does not otherwise restrict his self-expression, he'll find himself with display windows in front of which passers-by will gather.

However, whoever the decorator, pass along the suggestion that he study the display windows pictured weekly in the news section of MOTOR AGE. These pictures will prove a valuable source of ideas.

Differing slightly from the retailer who gives his window one good dress and then forgets about it, is the dealer who makes changes at long intervals and without regard to timeliness. The experience of successful merchandisers dictates a new appeal at least once each week in the case of regular windows, with seasonal expressions permitted a longer life. These latter, such as Christmas, Easter, etc., should be conceived in ample time to take full advantage of the events which inspire them. The general run of holidays falls in the classification of regular windows. These include New Year's Day, Decoration Day, Fourth of July, Thanksgiving Day, etc.

Furthermore, the holiday window should be torn down the day following the celebrated occasion. Seeing a Father's Day display a week after the paterfamilias has been honored and forgotten evokes only ridicule.

The window is a more direct appeal to the buyer than any other form of advertising and therefore it is deserving of proper attention and treatment in keeping with the dignity to which the automotive industry has attained. Fear, a big resistance for the salesman

to overcome, is not present in the window and the appeal, once there, can easily be handled when the customer inquires. If the dealer bears these facts in mind he will have sufficient ammunition to defeat any doubts that may assail him.

A scientist has stated that 82 per cent of the impressions which influence the actions of people are received through the eye. That's proof that every member of the automotive retail trade should strive to make his window the apple of his eye.

## Proper Accounting Dealers' Big Need

(Continued from page 42)

a very large number of cars per year. To make a long story short, it seems to me that both Ford and General Motors are governed by the same economic principle: viz., to give the greatest possible value in their respective price classes. There is absolutely no reason why General Motors cannot today give a greater per dollar value than anyone in the world.

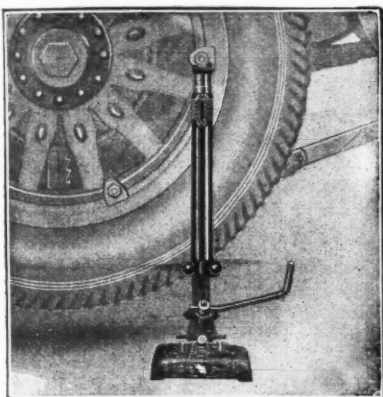
There have been many articles appearing in the columns of your newspapers dealing with the soundness, from the economic standpoint, of what I might term "Instalment Buying" or "Consumer Credit," as it is sometimes called. We have come to the definite conviction that so long as a proper credit structure is maintained it is not only a sound principle but a very constructive and progressive move forward and one that in our opinion is contributing much to the prosperity of our country.



# New Accessories and Devices

## Brake Testing Tool

**T**HE Master super brake tester enables service stations to adjust brakes accurately. This device is said to locate out-of-round drums, a high spot on the lining, oil on the lining, or improper band clearance, giving an accurate comparison of the frictional resistance that each brake band is offering to each brake drum.



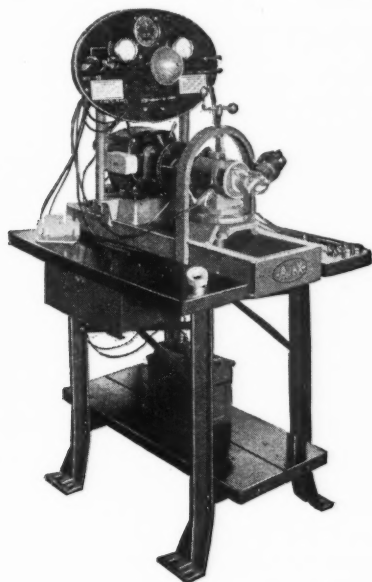
Four wheels may be tested in five to 10 minutes.

Tester, complete with the clamp and pedal holder, \$25.

Manufactured by Master Mfg. Corp., 504 Monadnock Block, Chicago.

## Ajax Test Stand

**T**HE Ajax Electric Co. of Kalamazoo, Mich., has met the demands of service stations for a complete and universal electrical test stand at a reasonable price, by bringing out the Model A-20 which sells for \$295. The Model



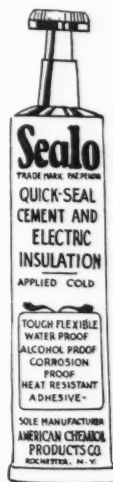
A-20 stand is complete and will handle electrical tests on ignition coils, cutouts, condenser, starting motors generators, magnetos, armatures, and will also test any part or parts of these units.

One of the outstanding Ajax features is the unique design of the generator table which enables the operator to mount any size or type of automobile generator in the stand very quickly and easily. This feature saves considerable time and is especially desirable in a large shop where all kinds of generators are serviced and speed is an important item.

Another feature of note is the fact that all parts of the Ajax stand are interchangeable and parts may be purchased separately from time to time. In this way the man who does not feel a need for the complete stand, or who cannot afford the complete Model A-20 stand, can purchase the essential units and add to them from time to time as he feels the increasing need of this equipment. Another way, however, that the complete stand can be purchased is on an easy time-payment basis which is so arranged that the extra profits made possible by complete equipment can assist materially in the purchase of this item.

## Sealo Compound

**S**EALO is a newly developed liquid that cements, seals and insulates. Sealo takes hold immediately. It protects electrical appliances from wear and short circuit, repairs worn insulation, is appropriate for use on radios and automobiles, and may be used in the home. Sealo is prepared in a handy collapsible tube convenient to use. Dealer counter displays are furnished. Made by The American Chemical Products Co., Rochester, N. Y.



## Sliding Rule

**T**HIS new Lange sliding rule, manufactured by Henry G. Lange Machine Works, 166 North May St., Chicago, is used for quickly obtaining inside measurements such as the width of space for glass in sedan doors.

This rule extends from 19 in. to 36 in., and gives direct readings of widths in inches and fractions of an inch. To use, insert one end of rule in channel and extend other end of rule into chan-

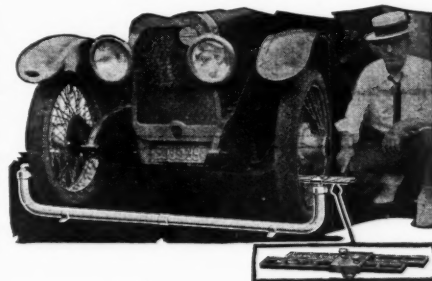
nel on opposite side. The reading at the overlap of the sliding rule is the exact width.

Price, 60 cents; postage extra.

## Bear Aligner No. 30

**T**HE new Bear wheel aligner, model 30, made by The Bear Manufacturing Co. of Rock Island, Ill., is based on the principle of showing the toe-in by the comparative readings of two parallel measuring bars (see illustration) one of which is set in position against the wheel rim at the rear, and the other at the front part of the wheel.

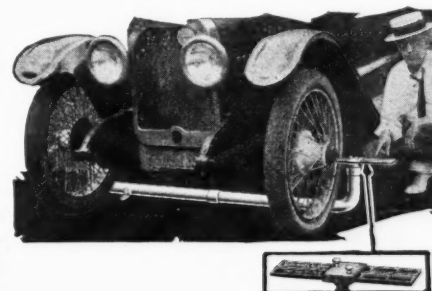
A particularly important feature of



the new aligner is the fact that there is no need to reach under fenders or bumpers and no need to crawl under the car to take readings. All measurements are shown in plain sight on the outside of the wheel where they may easily be shown to the customer in actual demonstration.

All measurements are taken from outside to outside of the front wheels. This naturally avoids all difficulty with front wheel brakes and balloon tires.

The aligner is shown in the illustration in the position for the first measurement, with abutment bars in contact with the felloe or rim of the wheel. The parallel measuring bars are shown greatly magnified as they are set in position by the thumb screws in taking



the measurement at the rear of the wheel. The second measurement is taken at the front of the wheel by pushing in one of the measuring bars to contact with the felloe rim, the other being rigidly set in its first position. The difference in readings of the two bars gives the exact amount of toe-in.

# READERS' CLEARING HOUSE

Questions Answered By C. Edward Packer

## Plenty of Devices for Stopping Leak

We are having considerable trouble with an oil leak past the rear main bearing on a G. M. C. truck with engine No. K-16.

Do you know of a better way to stop this leak other than the regular scheme of using a felt washer or cork? Any information you may have will be greatly appreciated.—Ray Lindberg, Whatcom High School, Bellingham, Washington.

THERE is probably no other engine that uses as many devices for preventing the leakage of oil at the rear main bearings, than does the G.M.C. Model K-16. Here you have the customary oil slinger at the back of the bearing, behind this a cork and below this a groove with a return pipe to the sump. In spite of all this, however, oil does sometimes get by and when that trouble develops you will probably find that the cork check valve in the breather cap is stuck. This cork valve very nearly fills the breather cap, and rests on a smooth surface in the cap so that when any pressure is developed in the crankcase, as a result of blow-by or other conditions, the cork will rise from its seat and permit the air to escape. If this cork is stuck, the pressure developed in the crankcase will tend to blow oil out through the bearings.

As you know this breather is installed on the front valve cover, and if leakage persists it would be well to install a breather type cover complete with breather, in place of the rear valve cover so as to have two breathers func-

tioning. It is a good plan to secure the rear bearing cork with an 8/32 screw to keep it from turning with the shaft. Excessive end play in the crankshaft will also tend to work oil out of the rear main bearings.

Play of .002 of an inch as measured at the center main bearing is recommended. If oil leakage continues, try attaching a flexible tube to the bottom of the oil return pipe and lay this tube in the sump so that one end of it is close to the oil pump intake.

## Peculiar Overheating Problem

I have a 1923 Rickenbacker six, which has been giving some trouble with heating. The engine does not run hot all the time, but seems to take spells. For instance, I recently drove it 400 miles in one day—for the first 250 miles the temperature did not go up to summer average on my Moto Meter—then for 75 miles I had to fill the car with water every few miles. The radiator each time would be boiling and steaming inside of 2 miles after each filling. The last 75 miles the engine ran cool.

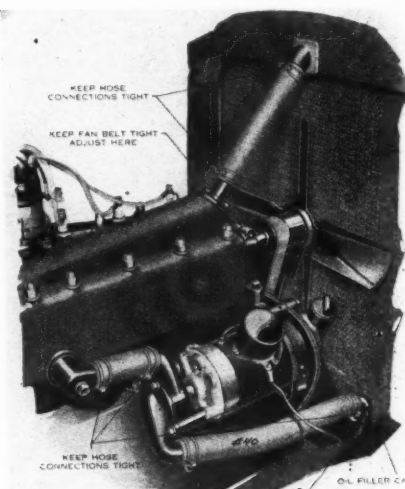
On the return trip the following day I drove 300 miles before it started to heat, and then for 90 miles I could not keep it from boiling. It did not seem to make any difference whether I drove fast or slow. The last 10 miles the engine cooled down again far below the boiling point.

Before making this trip, I removed the radiator and cleaned it with muriatic acid and water. The circulation through it seems to be very free. I have also checked over the water hose, water pump, timing, fan belt and have not found anything to cause the car to

heat. I use light oil in the engine as recommended by the manufacturers. The car is in good condition and runs fine except for the trouble I have just mentioned.

Can you offer any suggestions as to how to overcome this trouble?—R. L. Hotchkiss, St. James, Minn.

WHILE your method of cleaning the radiator is a good one—we would suggest that you dissolve 2 lb. of regular washing soda in water and place this in your cooling system and

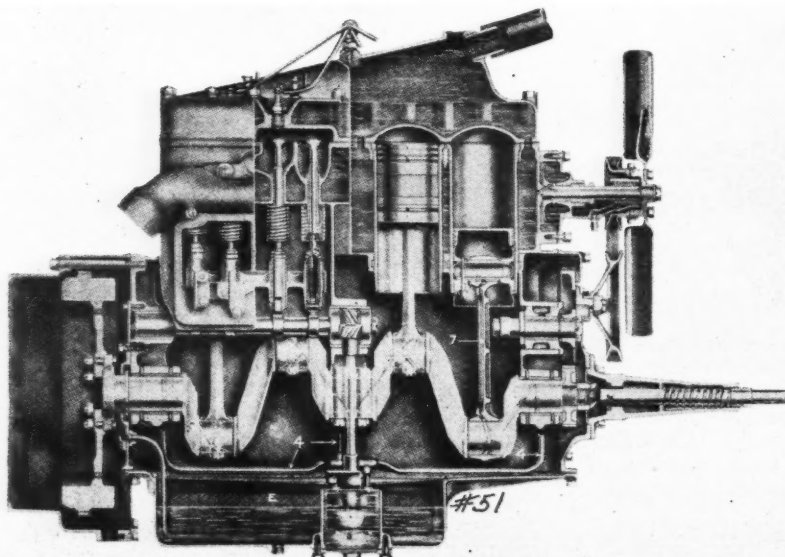


permit it to circulate with the engine running and the radiator covered so that the temperature is practically at the boiling point. Of course, be careful not to get any of this on the finish of the car, as that would be very destructive to it. At the end of 20 or 30 minutes of circulation—remove the lower hose connection and permit this solution to drain out rapidly, then flush the engine and radiator thoroughly with the hose.

The fact that your car alternately heats and runs cool, seems to indicate just one thing and that is that the impeller on the pump shaft is slipping. This is held on with a pin which may have been sheared at some time past and which is merely jammed in place, and when the conditions are just right the impeller begins to slip and continues to slip until it just chances to jam when the car will run cool again.

If any of our MOTOR AGE readers have run into this problem or have any additional suggestions to make we will be more than glad to hear from them.

In the past practically every type of mechanical problem has been met and solved by some reader. Who has the dope on this?





## [ READERS' CLEARING HOUSE ]

**Hums at High Speed**

We have a Cleveland 1923 model which has been completely rebuilt. Engine has been re-bored, valves refaced, bearings renewed and adjusted, etc. Engine performs excellently for smoothness, power and idling silence, but upon accelerating it, it has a hum in the front end much similar to the old Northway motors that were used in the Olds and Oaklands. But, this car has a timing chain and not gears so therefore should not have that hum. The timing chain was inspected and looked good with plenty of take up left, so therefore was not renewed. Is this hum characteristic of the Cleveland motor? Would a new chain stop it or could it be the generator that hums at high speed? The car is now in paint shop.

In the meantime we would appreciate your suggestion as we are going to tackle the job when the car comes from the shop.—Joseph Sorensen, Minneapolis, Minn.

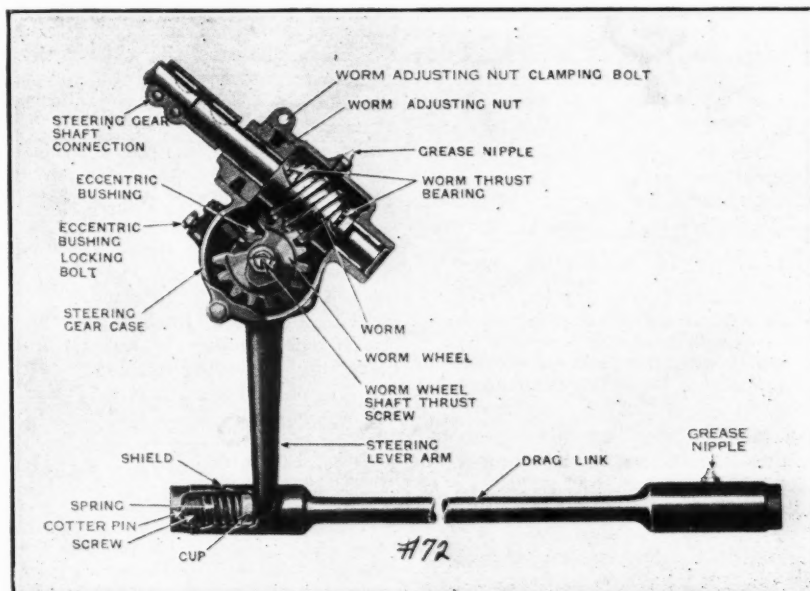
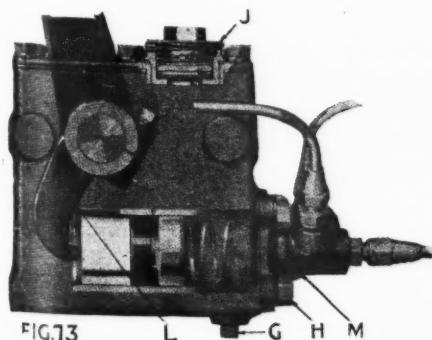
**I**F your old chain has about  $\frac{1}{2}$  to  $\frac{5}{8}$ -in. of up and down motion between the crankshaft and camshaft socket we do not believe that the hum is coming from there. From your description it sounds as though the chain might be adjusted too tight and if it is, the cure is obvious. To check to see if the generator is humming you can ground the generator terminal. Be careful not to ground the cutout terminal as that would not accomplish the desired result and might harm the machine.

Another way you can check is to raise the third brush from contact with the commutator which would have the same effect as grounding the generator, namely, to relieve it of all load. If the hum continues check the car by removing the fan belt as it is possible that the fan blowing the air through the radiator sets up a humming sound at high speed. We have not heard of this hum being characteristic of this car in any way and unless all of the adjustment is gone from the chain and you have up and down motion in excess of  $\frac{5}{8}$ -in. in the chain, you would not need to replace it.

**New Hydraulic Brake Data**

Does the liquid enter the master cylinder going by the piston on the latest type of Lockheed hydraulic brakes?—Walter Daniels, McKibben Motor Co., Cedar Rapids, Iowa.

**W**E are showing a cut of the supply tank and master cylinder of the latest Lockheed hydraulic brakes. From this you will see that the fluid does not



pass around the piston of the master cylinder, but is admitted to the cylinder through a check valve.

**Both the Same**

I notice in one of my old copies of *MOTOR AGE* that the Model 231 Nash Special Six has a plate on top of the clutch cover and it says to turn this to one side to oil the clutch release bearing. It says to oil this every 500 miles. Is this similar to the arrangement of the Model 235?—L. G. Dutcher, Wichita, Kansas.

**T**HE construction of the 231 and 235 chassis is practically identical and is exactly the same with regard to this plate.

**Weight of Car Raises Tire Pressure**

We would like to have *MOTOR AGE* settle an argument for us. Let us assume that a 30 x 6 balloon tire is inflated to exactly 35 lb. pressure. This tire is not on the car, that is, there is no weight on it when it is inflated. Then the tire is put on the right rear wheel of a Hudson 7-passenger sedan. How much, if any, would the pressure be increased in the tire? Please give me the formula for figuring this out.—George Boyd, Oak Street Garage, Louisville, Ky.

**T**HE pressure will be increased in the tire when the load of the car is placed on it. However, this increase will be so slight that you will not be able to check it even with the best tire gage on the market. With the temperature remaining constant, the pressure in the tire will increase as the volume is decreased. That is, if the weight of the car decreased the volume of the tire 5 per cent, the pressure would be increased 5 per cent. We do not believe, however, that there will be this much change in the volume of air in the tire, but feel that the increase will be in the neighborhood of 1 to 2 per cent which could not be read on your tire gage and which, for all practical purposes, can be ignored.

**Probably Damaged by Collision**

After adjusting the steering gear on a 1925 Dodge, it worked fine for about three weeks. Then it was brought in with binding in the gear housing. Moving the eccentric bushing did not help any. Might the eccentric bushing be replaced to advantage?—Volunteer Garage, St. Marys, Ohio.

**Y**OUR trouble sounds to us very much as though the car had been struck on the front wheels and the one wheel shaft bent in the bushing. The only other possibility is that the one wheel shaft is frozen in the bushing, and in either case the entire steering gear should be overhauled. You will find that the steering gear is riveted to the frame. It will be necessary to cut off these rivets and when installing it, merely bolt it back in place.

**Mr. Willard of Mount Shasta Lends a Hand**

**I**N your Sept. 8 issue I noticed that Roscoe Baxter, Grafton, Ill., has had some difficulty with oil pressure. He does not mention the model Oldsmobile that gave the trouble, but it is my belief that the trouble may have been caused by oil filter connections.

In a great number of cases the total oil output from the pump does not go through the filter; it, to use an electrical term, being in parallel with the crankshaft passages and takes oil as though it were one of the mains.

To regulate the amount of oil diverted to the filter and consequently the oil pressure, it is necessary to use a special fitting somewhere in the line similar to the ones used in pressure gage lines with a very small opening to keep the needle from vibrating. We have had several cases of a similar nature and whipped it by soldering a union fitting shut and boring out with succeeding larger drills until the idling pressure was affected, then resoldering and using

## [ READERS' CLEARING HOUSE ]

the hole diameter that is best suited.

The above procedure whipped the most obstinate case of oil trouble I have ever found, and that covers 15 years.

I hope this may be of value to some of the boys as I am the debtor of this department considerably.

(Many thanks for your cooperation, Mr. Willard.)

### Do Not Undercut the Starter Commutator

Would it be of any advantage to undercut the mica on a 6-volt starting motor that uses only two brushes? If so, why?—Walter Daniels, MaKibben Motor Co., Cedar Rapids, Iowa.

THE mica on starting motor commutators should never be undercut. The reason generator commutators are undercut is because of the amount of running that they do and the soft material used in the brushes and the light spring tension which holds the brushes in contact with the commutator. For these reasons if the mica were not undercut, the copper would wear down, leaving the mica high, which would cause the brushes to jump and the commutator to burn. With the starting motor, however, the brushes are of hard composition and the brush springs are very stiff, which results in the mica and copper wearing down uniformly. Consequently, it is undesirable to undercut the mica.

### Why a Battery Loses Its Charge

Can you tell me what is wrong with a battery that has been rebuilt and is not sulfated and has not been frozen and yet will not hold a charge?—White's Garage, Oolitic, Ind.

IF a battery charges up properly but loses its charge in a week or less, as indicated by specific gravity ratings, the following troubles may exist: There may be impurities in the cells due to the use of impure water in the electrolyte or in the separators. Some impurities do not attack the plates but merely cause self-discharge. The remedy is to dump out the old electrolyte, rinse the jars with pure water, fill with new electrolyte of the same gravity as the old, and recharge. If this does not remove the impurities, the battery should be opened, the plates washed, jars cleaned out, new separators put in, and the battery reassembled and charged. There may be a slow short circuit due to defective separators or excessive amount of sediment.

If preliminary treatment, as just mentioned, does not cause the battery to hold a charge, the opening of the battery and the subsequent treatment will remove the cause of the slow circuit. Of course it is also well if you are bothered with batteries running down while installed in the car to see that there is no short in the wiring of the car. Sometimes a very slight short is present, such as that developed when a section of armored cable becomes

grounded and the current leaks away through the spiral armored winding on the cable. Due to the high resistance of the armored covering you may notice no heat or smoke but the slight discharge that results will probably be sufficient to run your batteries all the way down in the course of a few days. The best way to check for this is to install the battery in the car and connect up the ground lead. Then take a voltmeter and place it in series with the other battery connection. With all switches off there should be no reading, but if the reading is noticed on the voltmeter, it will be necessary to check all circuits one at a time until the voltmeter hand goes back to zero.

### Sluggish Starter Seems Shorted

I have been a reader of MOTOR AGE for a long while, but this is the first time I have asked for information. I have a Ford that does not start readily. I have cleaned the ground connections, put on new positive cable and a new switch. I have had the starting motor off and went over it carefully—it seems to be O.K. but I can't get over 5 lb. of torque when locked and pulling 375 amp. When running with no load it takes from 55 to 60 amp. and seems to run fast and all right. The bearings are O.K. and I even put in a rework armature, but that did not help any.

I put on a new battery and still it cranks the engine as though the battery were half dead, but I know the battery is O.K. The engine turns over freely.—Gibson Garage, P. O. Box 450, Bryan, Texas.

FROM the amount of current pulled on lock torque, we are inclined to believe that your battery is of low

capacity, or that there is something in the starter that is causing high resistance. Following are the test readings that you should get with this starter when checked with a battery that is fully charged and in good condition:

Torque	R.P.M.	Volts	Amp.
1 lb. ft.	2500	5.5	125
5 lb. ft.	1050	4.4	330
9 lb. ft.	425	3.6	465
13 lb. ft.	lock	3.0	580

You will see from the foregoing figures that the starter should pull 13 lbs. on a 12 in. arm. When locked the voltage at the starter should be 3 and the amperes 580. In the Ford starter the current is divided at the terminal, half of it going to the left around two of the field coils and half of it going to the right around the other two, from there it goes to the two insulated brushes which are 180 deg. apart, and then through the armature and out by way of the grounded brushes. One possibility is—that you have brushes of too high resistance, and we would recommend that you look into this and see that they are hard and of a bronze color. If the brushes appear to have a high percentage of carbon in them, in other words if they look somewhat like generator brushes, they should be replaced with the hard starter type brushes.

Each brush spring should have a tension of 16 to 18 ounces. The pig-tails should be securely screwed to the brush holders.

### Battery Voltage on Open Circuit Meaningless

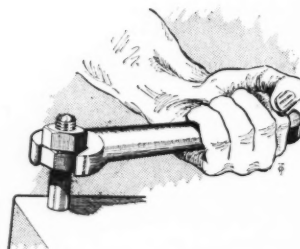
What is the meaning of a 7-volt battery reading when the hydrometer shows between 1.175 and 1.210?—L. G. Dutcher, Wichita, Kansas.

YOU do not say whether the 7-volt reading was obtained with the battery charging or discharging, or at what rate. A voltage reading on an open circuit battery is absolutely worthless. In order to be of any value it is necessary that the voltage reading be taken when the battery is either charging or discharging. A fully charged storage battery will read between 2.5 and 2.7 volts per cell, or around 7½ volts, or a little better, over the entire three cells while the charging current is still flowing. At this time the gravity reading should be between 1.300 and 1.280. If your hydrometer reading is 1.175 in one cell and 1.210 in other cells, you have internal trouble in the battery and the battery should be opened and examined. It is quite likely that the separators are injured, or that there is high sediment that is causing partial short circuit between adjacent plates. A cracked jar will also cause trouble by permitting acid to escape. When the level is brought up with water, this will result in a low gravity reading for the leaking cell. The gravity reading in all cells should be the same within 15 points.

## SHOP KINKS

*Ideas that have proved useful*

IN order to remove a stud without damaging the thread, I find that the quickest way is to run one nut into place and to screw another nut tight against it and then turn the stud out by using a wrench on these two nuts.—John Fedorowicz, West Warwick, R. I.



Readers of MOTOR AGE are invited to submit ideas that they have found useful in doing some particular service job in the shop in a better or quicker way. For each one published \$2.00 will be paid. Whenever possible the idea should be accompanied by a sketch or diagram from which a drawing can be made.



# Legal Queries on Automotive Topics

## Breaking Relations With Collection Firm

Do you have any information in regard to operations of the Blank Commercial Adjustment Co.?

Last March a representative of theirs came here and stated that his concern was getting up a list of delinquent accounts in this vicinity and that they would have a crew of men here in a week or so and collect these accounts at a commission of 25 per cent.

We gave them 56 accounts and signed a small slip which I read very carefully. There has to this date not been any personal campaign here, but this company has mailed collection letters to accounts and at least one party notified us that his account has been paid into this company some time ago. We did not get any report of this or any money. We have sent them commission for several accounts that were paid to us.

Since this firm did not put on a personal campaign as their representative promised, we wanted them to release our accounts as we did not see any advantage in them having our accounts tied up and collecting commission on the occasional one we succeeded in getting money out of.

We have written them several times but they state they will not release accounts as the contract we signed stated they had the right to keep these accounts 10 months or more as long as they were working on them. We did not sign any such contract and are enclosing our copy of what really was signed by writer and I fail to see any mention of tying up these accounts 10 months. Please return this copy to us.

We would appreciate it very much if you would advise what would be proper action to take in this matter as it sure does not seem to us that stuff like this could be pulled off legally.—F. J. Mayer, Prop., Oakhurst Garage, Greenville, Pa.

**Y**OUR relations with this adjustment or collection firm rests upon the contract between you. After considering just what are the provisions of the contract, then one must look to the actions of the parties to see if all have complied with them and if any have violated the provisions. First you set out that this firm's representatives made certain promises about having a crew to come into your vicinity and collect the accounts which you had turned over to it. We cannot refrain from impressing you with the question: Was this promise to provide a crew of men to collect written into the contract? Unless you can show fraud in this representative which induced you to enter into the contract such promise would avail you nothing, for the rule of law is that where parties negotiate a contract all preliminary promises are void if not written into the subsequent agreement. There are certain exceptions or apparent exceptions to the rule, as where the written contract is not complete in itself and other agreements supplement it. But in such ar-

## Answers by Wellington Gustin

rangements as you portray all such prior promises should be included in the written statement of the contract or agreement. If it is written into the contract there is the undisputable evidence that such an agreement was made. As it is, in this case, after the writer had made a personal call upon this firm he was told no such agreement existed. Personal collectors were put on only at the will and discretion of the management.

Of course if you could show such a provision existed, then you would be justified in treating the contract at an end. But should you treat the contract at an end, with several hundred dollars in the hands of the firm, they would have an advantage. They would perhaps claim damages for breach of contract and hold the money in their hands, and you are forced to come into a foreign state to sue.

The printed form you submit is no agreement. But attached to the list of accounts becomes a part of the agreement claimed by the company to be signed by you.

Now, if the amount of moneys in the hands of the firm were immaterial compared to what you were convinced you could collect otherwise, and you were satisfied you had been tricked by the solicitor, or your signature secured by trick or false inducement, you would be justified in regarding the agreement at an end. You could then notify your customers to make payments only to you. The firm would doubtless hold the money in their hands and force you to sue for your part. But otherwise they would be forced to come into your own courts to sue in case they claim the accounts, or claim breach of contract on your part.

## It All Depends Upon the Contract

We would very much appreciate it if you would inform us whether you know of a case having been decided in the courts any place in the country where a car manufacturer cancelled a dealer's contract and gave a franchise to a new dealer in the same town because the old dealer would not sell his business to the new dealer on the terms dictated by the manufacturer.

It seems to us that if the manufacturer has no excuse other than that the old dealer who wants to quit business would not sell to the new dealer solely on the terms dictated by the company's factory representative he would not be justified in cancelling the old dealer's franchise and setting up a new dealer in business, and that if he does so he would be liable in damages to the old dealer.

If you have heard of any instances where

such a matter has been taken into court or adjusted in any other way we will be very grateful for this information.—H. L. Dodd, 1214 W. 18th St., Oklahoma City, Okla.

**W**E know of no such decision on the point of your inquiry. To locate such a decision might require an enormous amount of research work through tens of thousands of cases.

The dealer's relation with the manufacturer of the car he sells rests on contract. To that alone either must look in case of dispute. If your contract or franchise as you call it has not been violated by the dealer then the manufacturer, party to the contract, cannot violate the contract without becoming liable for damages. If a dealer is carrying out his agreements, fulfilling his obligations, under the contract, he is in a position to make the other party to the contract respect its terms in a court of equity, where there is no remedy at law, otherwise he may bring suit for damages. But the dealer should look searchingly into that contract to see if his contracting party has reserved such right of cancellation, or if his actions in any matter might be construed as ending the contract, or give the other party a right to cancel. The proper construction of a contract in such matters should be left to a lawyer.

The mere desire of a dealer to quit business would not justify a cancellation of contract. So long as he sells the required number of cars and otherwise does what he agreed to do as set out in the contract what is in his mind will not affect his contract.

But does the contract provide manner for transfer of franchise and business? And does it provide that the manufacturer shall set the price and terms? If not, the dealer is bound to heed the advice of the manufacturer. And if the dealer can prove damages from the unwarranted interference of a factory representative, he should be able to secure a judgment for the amount proven. It is a general rule of law that one is liable for causing another to breach his contract, or for preventing a contract between parties, etc., without just cause. But specific damages must be shown from the acts of another.

If you have had a valuable franchise and it has been taken away from you without right, then you are justified in placing the whole matter in the hands of your lawyer for suit to recover the damages. Perhaps the contract may be of a kind that the cancellation of contract by company may be set aside and the company enjoined by court order from granting any other franchise which would be in violation of your own contract.

# PURR AND PING



## What a Subscription Salesman Hears

CLEVELAND—"Bigger and better than ever." "I always liked MOTOR AGE but I have liked it more than ever the last four months." "MOTOR AGE is publishing a lot of material that I am able to apply to my work nearly every week." "My wife gets her wise cracks out of the Hot Dogs' page to tell the members of her bridge club when they hold a meeting." "MOTOR AGE is doing a wonderful job by printing so much interesting news of the trade and industry every week." These are only a few of the good things I have been hearing from our subscribers.—J. W. Walsh.

## Now We Know Who Pays and Pays

CHADWICK, ILL.—I must confess that I've gotten a lot of good out of MOTOR AGE and it has well paid for itself.—Art Schindler.

## This Ought to Appear in Red Ink

DULUTH, MINN.—I think MOTOR AGE is the best in the field. I would not miss it for \$20 a year.—Martin Rosendahl.

## Every Man to His Taste

TESCOTT, KAN.—The specifications and the questions and answers are the two features that we like best.—Welding & Auto Works.

## Glad We Can Fix You Up

HANFORD, CALIF.—Your articles on repairing form the most interesting information for me.—J. D. Orchard.

## Fetching Flowers from Friend Fitch

DELTA, UTAH—Sure do appreciate MOTOR AGE. Hate to miss it. Get a lot out of it.—C. W. Fitch.



LETTERS to the editor from those whose "attention has been called"; from those who point with pride and those who view with alarm, from those who are easy to please and those who are hard to please; from those who are happy when they find a good thing and those who are happier when they find something they consider not so good; from those who boost and those who knock; from those who see the doughnut and those who see the hole; in other words, Dear Subscriber, from you and you and you—as well as from the man who borrows your copy of MOTOR AGE or reads it over your shoulder.

## "Lavender and Old Lace"

PHILADELPHIA—I never used to read MOTOR AGE. It reminded me of going through an old lady's trunk. You know how you turn through it, and smell the lavender and see the old lace. But it would have depressed me to have to read it. Now it does not seem possible it is the same magazine. Reading it is just like having some one talk to you. You just sense the personality of John Cleary all through its pages. I never seem to have time to read it at the office, and have to snatch our copy to take home with me.—G. S. E.

## Pin a Blue Ribbon on This One

SPEARVILLE, KAN.—The department that interests me most is the Ford Car Department.—Zirkle Motor Co.

## This is No Shock to Us

MARBLE, MINN.—I like the electrical information in MOTOR AGE.—L. D. Sweet.

## Thank Ya, Suh!

COVINGTON, KY.—The whole book is good.—L. H. Bennett.

## M. A.—O. K.

JACKSONVILLE, OHIO—MOTOR AGE is O. K.—M. H. Leisure.

## Rosh Hashana! Gut Yontif!

NEW YORK—And when better publications are built, John Cleary will build them. That's that.

I was surprised to note in last week's issue of MOTOR AGE that you displayed the photograph of the 72 Chevrolet Club, but omitted to mention that this club was serenaded at Atlantic City by the New Departure Company's band. They came all the way from Bristol, Conn., for this purpose.

Once in Atlantic City, the New Departure band was invited to lead one of the important divisions of the Atlantic City Beauty Pageant Boardwalk Parade. Some honor for the Ball Bearing Band Boys from Bristol.

Charles F. Olin, general director of advertising, acted as business manager for the band on this trip.

Happy New Year, John!—W. I. R.

## Antipodean Amiability

BACCHUS MARSH, VICTORIA, AUSTRALIA—I like the whole book, or I would not be renewing my subscription.—Edgar Smith, Smith & Blaker Co.

## And No One to Say Him "Nay"

PASADENA, CALIF.—I sure think S. MOTOR AGE is a better paper since it moved.—Einer Petersen.

## Toot the Woiks

GREENSBURG, PA.—MOTOR AGE—the whole works—interests us.—Seanor Motor Car Co.

## And We're for You!

LOCKWOOD, MO.—Keep up the good work. We are with you.—A. R. Workman.

## And Echo Answered "Why Not?"

SAGINAW, MICH.—I have been a dirt track driver for nine years and agree with Wm. H. Hunter of Nunda, N. Y., and why not have more racing news?—E. Baker.





# Prices, Weight and Equipment of Current Passenger Car Models

Important Changes in  
Specifications and Price  
Tables since last issue.

## CHRYSLER "62" New Business Coupe

## JORDAN JE New Specifications and Body Models

Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment
<b>AUBURN</b>				
<b>"6-66"</b>				
2-4p. Roadster...	\$1095	2	2750	ahrw
5p. Touring.....	1145	4	2760	ahrw
2-4p. Cabriolet...	1295	2	2850	
5p. Sp. Sedan.....	1195	2	3040	ahr
5p. Sedan.....	1295	4	3040	ahr
5p. Wand. Sedan...	1345	4	3040	ahr
<b>"8-77"</b>				
2-4p. Roadster...	1395	2	3005	ahmnrw
5p. Touring.....	1445	4	2960	ahmnrw
2-4p. Cabriolet...	1595	2	3170	
5p. Sp. Sedan.....	1495	4	3350	ahmnr
5p. Sedan.....	1695	4	3390	ahmnr
5p. Wand. Sedan...	1745	4	3390	ahmnr
<b>"8-88"</b>				
2-4p. Sp. Rdster...	1995	2	3180	ahmnrw
5p. Touring.....	2045	4	3200	ahmnrw
2-4p. Cabriolet...	2095	2	3600	
5p. Sp. Sedan.....	2095	4	3380	ahmnr
5p. Sedan.....	2195	4	3450	ahmnr
5p. Wanderer.....	2245	4	3450	ahmnr
<b>147" W.B.</b>				
7p. Touring.....	2295	4	3790	w
7p. Sedan.....	2595	4	4200	ahmnr
<b>BUICK</b>				
<b>"115"</b>				
4p. DeL. Rdstr....	\$1195	2	2990	ahmnpr
5p. Touring DeL....	1225	4	3040	ahmnpr
2-4p. Coupe.....	1195	2	3110	ahmnr
5p. 2d. Sedan.....	1195	2	3215	ahmnrt
5p. 4d. Sedan.....	1295	4	3300	ahmnrt
5p. Ctry. Club....	1275	4	3190	ahmnr
5p. Town Bro'm....	1375	4	3305	ah
<b>"120"</b>				
4p. Coupe.....	1465	2	3800	ahmnr
5p. 4d. Sedan.....	1495	4	3870	ahmnrt
5p. Town Bro'm....	1575			
<b>"123"</b>				
2-4p. Sp. Rdster...	1495	2	3655	ahgmprw
4p. Sp. Touring...	1525	4	3735	ahgmprw
5p. Coupe.....	1850	2	3940	ahmnr

Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment
<b>CADILLAC "341"</b>				
<b>"Fisher"</b>				
2p. Roadster.....	\$3350			
4p. Phaeton.....	3450			
4p. Sp. Phaeton...	3950			
7p. Touring.....	3450			
2-4p. Coupe.....	3295			
2-4p. Conv. Coupe...	3495			
5p. Coupe.....	3495			
5p. Sedan.....	3595			
5p. Town Sedan...	3395			
7p. Sedan.....	3695			
5p. Imp. Sedan...	3745			
7p. Impr. Sedan...	3895			
5p. Imperial Cab...	3745			
7p. Imperial Cab...	3895			
<b>"Fleetwood"</b>				
5p. Sedan.....	4095			
5p. Sedan Cab....	4095			
7p. Sedan.....	4195			
7p. Sedan Cab....	4195			
5p. Imperial.....	4245			
5p. Imperial Cab...	4245			
7p. Imperial.....	4445			
7p. Imperial Cab...	4445			
...Town Cab Con...	5000			
...Town Cab Con...	5500			
...LimBro'm Con...	5500			
<b>CHANDLER</b>				
<b>"Big Six"</b>				
2-4p. Roadster...	\$1695	2	2200	Ahmnrw
7p. Touring.....	1695	4	3360	ahmnw
5p. Met. Sedan...	1495	4	3570	ahjmnw
4p. Coupe.....	1675	2	3435	ahmno
3p. Ctry. Club....	1675	2	3435	ahno
5p. Met. DeL. Sed.	1595	4	3570	ahmnrtv
7p. Sedan DeL....	1795	4	3725	ahmnrtv
...Royal Sed....	1795	4		ahmnrtv
<b>"Spec. Six"</b>				
5p. Touring.....	945	4	2475	ah
5p. DeL. Touring...	1005	4	2475	ahw
2-4p. Rdstr....	1135	2	2470	ahw
5p. Sportsster...	1145	4	2650	ahw
5p. Sedan.....	965	4	2740	ah
3p. Coupe.....	1035	2	2620	ah
2-4p. Coupe.....	1135	2	2650	ah
5p. DeL. Sedan...	1135	4	2635	ah
3p. DeL. Coupe...	1125	2	2620	ah
2-4p. DeL. Coupe...	1235	2	2650	ah
<b>"Roy. St. 8"</b>				
7p. Touring.....	1995	4	3645	ahjmnprw
4p. Roadster.....	1995	2	3375	Ahmnpw
4p. Coupe.....	1995	2	3610	ahmnopr
4p. Ctry. Club....	1995	2	3610	ahmnopr
5p. Sedan.....	1995	4	3760	ahmnopr
7p. Sedan.....	2095	4	3870	ahmnopr
<b>CHEVROLET</b>				
<b>"AA"</b>				
2p. Roadster.....	\$ 525	2	1890	dr
5p. Touring.....	525	4	1965	dr
2p. Util. Cpe....	625	2	2090	dhr
5p. Coach.....	595	2	2190	dhr
5p. Sedan.....	695	4	2275	dhr
2-4p. Cabriolet...	715	2	2135	dhr
Imp. Land.....	745	4	2290	dhu

Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment
<b>CHRYSLER "52"</b>				
5p. Touring.....	\$ 750	4	2185	ar
2-4p. Roadster...	725	2	2210	ar
2p. Coupe.....	725	2	2355	ar
5p. Sedan.....	735	2	2350	ar
5p. Sedan.....	795	4	2455	ar
5p. De L. Sedan...	875	4	2390	ahr
<b>"62"</b>				
5p. Touring.....	1095	4	2645	aghr
2-4p. Roadster...	1175	2	2625	aghrnw
7p. Bus. Coupe...	1125		555	
5p. Sedan.....	1145	2	2770	aghr
5p. Sedan.....	1245	4	2840	aghr
2-4p. Coupe.....	1245	2	2750	aghr
5p. Land. Sedan...	1295		2855	aghr
<b>"72"</b>				
2-4p. Roadster...	1495	2	3005	aghrnw
2-4p. Sp. Rdstr...	1525		3005	
4p. Coupe.....	1595	2	3160	aghrnw
2-4p. Coupe.....	1545	2	3130	aghrnw
5p. Roy. Sedan...	1595	4	3225	aghrnw
5p. C.C. Sedan...	1595		3240	aghrnw
2-4p. Con't Coupe...	1745	2	3100	aghrnw
5p. Crown Sedan...	1745	4	3235	aghrnw
<b>"80"</b>				
5p. Phaeton.....	2495	4	3925	aghrnw
2-4p. Roadster...	2595	2	3805	aghrnw
7p. Phaeton.....	2645		4115	aghrnw
2-4p. Sp. Roadster...	2695		3805	aghrnw
5p. Sp. Phaeton...	2895		4240	aghrnw
5p. Std. Sedan...	2675	4	4155	aghrnw
5p. Std. Landau...	2795	4	4215	aghrnw
7p. Std. Sedan...	2895	4	4370	aghrnw
5p. Sedan.....	3195	2	4260	aghrnw
5p. Land. Sedan...	3295		4220	aghrnw
7p. Sedan.....	3295	4	4370	aghrnw
5p. Coupe.....	3095	2	4220	aghrnw
2-4p. Cabriolet...	3495	2	4065	aghrnw
7p. Sedan Lim....	3595	4	4450	aghrnw
5p. Town Car....	5495		4265	aghrnw
<b>CUNNINGHAM</b>				
<b>"V-7"</b>				
7p. Touring.....	\$6650	4	4600	Ceghklmnp
<b>"4p. Sp. Touring..."</b>				
4p. Sp. Touring...	6150	4	4500	Ceghklmnp
<b>"4p. Coupe..."</b>				
4p. Coupe.....	7600	2	4700	Ceghklmnp
<b>"6p. Limousine..."</b>				
6p. Limousine...	8100	4	5000	Ceghklmnp
<b>DAVIS "92-27"</b>				
5p. Leg. Tour....	\$1395	4	2915	Dhmar
5p. Sedan.....	1595	4	3000	Dhmar
5p. Imp. Sedan...	1795	4	3055	Dghmnrt
<b>"94-27"</b>				
5p. Roadster.....	1245	2	2350	dhr
5p. Touring.....	1285	4	2500	dhr
5p. Sedan.....	1285	4	2570	dhr
3p. Coupe.....	1285	2	2375	dhr
5p. Imp. Sedan...	1385	4	2575	Dghmnrt
<b>"98-27"</b>				
4p. Polo Rdstr...	1795	2	3000	aghrnw
5p. Touring.....	1795	4	3050	aghrnw
4p. Coupe.....	1865	2	3150	aghrnw
5p. Emp. Sedan...	1885	4	3200	aghrnw
<b>DIANA "St. 8"</b>				
5p. Phaeton.....	\$1695	4	3100	agmn
5p. Roy. Roadster...	1795	2	2995	agmnw
5p. P.B. Rdstr....	1895	2	2995	Bgmnw
5p. Cab. Rdstr....	1995	2	3160	aghrnw
5p. Cab. Rdstr....	2295	2	3160	aghrnw
5p. 4d. Sedan...	2035	4	3275	aghrnw
5p. 2d. Sedan...	1795	2	3170	aghrnw
<b>135" W.B.</b>				
7p. Touring.....	1795	4	3336	agmn

Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment
<b>DODGE BROS.</b>				
<b>"124"</b>				
5p. Touring.....	795	4	2581	Ar
2p. Roadster.....	795	2	2454	Ar
2p. Sp. Roadster...	845	2	2530	Der
5p. Sp. Touring...	845	4	2679	Der
<b>"128"</b>				
5p. Sedan.....	875	4	2600	Aehr
5p. DeL. Sedan.....	975	4	2609	Aehr
2p. Coupe.....	855	2	2428	Aehr
4p. Cab. Rdstr....	955	2	2463	Behr
<b>"Senior 6"</b>				
4p. Cab. Rdstr....	1595	2	3353	Cehmrtx
5p. Sedan.....	1495			ehr
5p. Sedan.....	1595	4	3412	Cehmrtx
4p. Coupe.....	1570	2	3315	Cehmrtx
<b>du PONT "E"</b>				
4p. Roadster.....	\$2800		3700	afghkwn
5p. Touring.....	2800		3850	afghkwn
4p. Coupe.....	3200		3850	afghkwn
5p. Sedan.....	3400		4100	afghkwn
5p. Con. Sedan...	3750	4	4100	Bfghkwn
<b>ELCAR "6-70"</b>				
5-7p. Touring.....	\$1275			
4p. Land. Rdstr...	1475	2	2580	ahjmnr
4p. Brougham...	1295	2	2670	ahjmnr
5p. Sedan.....	1395	4	2750	ahjmnr
<b>"8-82"</b>				
5-7p. Touring.....	1645			
2-4p. Roadster...	1870	2	3320	aeghmnr
5p. Brougham...	1595	2	3410	aeghmnr
5p. Sedan.....	1790	4	3490	aeghjmnr
<b>"8-90"</b>				
7p. Touring.....	2465	4	3675	aeghkmnr
4p. Land. Rdstr...	2295	2	3620	aeghmnr
5p. Brougham...	2195	2	3710	aeghimnr
5p. Sedan.....	2265			
5p. Sedan.....	2465	4	3895	aeghilmnr
7p. Sedan.....	2765	4	4245	aeghkmnr
<b>ERSKINE "6"</b>				
5p. Tourer.....	\$915	4	2300	aeghnr
2-4p. Spt. Rdstr...	965		2305	B
2p. Bus. Coupe...	895	2	2265	aeghnr
2-4p. Spt. Coupe...	965	2	2330	aeghnr
5p. Cus. Sedan...	965	4	2425	aeghnr
<b>ESSEX</b>				
<b>"Super Six"</b>				
2p. Speedabout...	\$700	2	2115	amnr
4p. Speedster...	835	4	2230	amnr
2p. Coupe, cloth...	735	2	2330	ahmnr
2p. Coupe, leather	750	2	2330	ahmnr
5p. Coach.....	735	2	2450	ahmnr
5p. Sedan.....	835	4	2490	ahmnr
<b>FALCON-KNIGHT</b>				
4p. Roadster.....	\$1045		2450	ghr
4p. Touring.....				
4p. G.G. Rdster...	1250		2500	Beghkmnr
2p. Coupe.....	995		2565	ghr
5p. Brougham...	995		2665	ghr
5p. Sedan.....	1095	4	2700	ghr
5p. Landau.....	1145		2735	ghrtu
<b>FLINT "60"</b>				
5p. Touring.....	\$1250	4	2750	aehmnr
4p. Spt. Rdstr....	1350	2	2885	Aehmnr
4p. Cpe. Rdstr....	1395	2	2890	aehmnor
5p. Sedan.....	1395	4	3030	aehmnor
5p. Brougham...	1395	2	3010	aehjmnr
<b>"80"</b>				
120" W.B.				
5p. Touring.....	1450	4	3245	aehmnr
4p. Spt. Tour....	1595	4	3395	aehmnr
4p. Coupe.....	1795	2	3500	aehmnor
5p. Sedan.....	1850	4	3625	aehmnor
<b>130" W.B.</b>				
7p. Touring.....	1595	4	3470	afhmnr
7p. Sedan.....	2050	4	3780	aehmnor
<b>"Z-18"</b>				
5p. DeL. Coach...	895	4	2580	aekhnor

# Prices, Weights and Equipment of Current Passenger Car Models

Passenger and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment	Passenger and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment	Passenger and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment	Passenger and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment
<b>FORD</b>					<b>"J-1"</b>					<b>LOCOMOBILE</b>					<b>"E-75"</b>				
2p. Runabout.....	\$360	2	1658	a	4p. Playboy.....	1545	2	2915	aghnmx	5p. Brougham....	\$1975	4	3525	afghkmnrx	2p. Speedster....	3485	2	4251	aeghlnprx
5p. Touring.....	380	4	1732	a	2-4p. Sp. Coupe...	1695	2	3070	aghnmx	5p. Sedan.....	1975	2	3575	afghkmnrx	4p. Speedster....	3485	2	4256	aeghlnprx
2p. Coupe.....	485	2	1820	a	5p. Cus. Sedan....	1695	4	3200	aghnmx	4p. Collap. C'pe..	1995	3	3431	afghkmnrx	5p. Phaeton....	3485	4	4017	aeghlnprx
5p. Tudor Sedan..	495	2	1950	a	4p. Cus. Vict.....	1695	2	3200	aghnmx	... Spe. Rdster...	\$3500	2	3870	aeghklmnp	7p. Tour. Speed..	3565	4	4480	aeghlnprx
5p. Fordor Sedan.	545	4	2002	B	<b>"JE"</b>					<b>"8-80"</b>					2p. Coupe Rdstr..	3565	2	4374	aeghlnprx
<b>FRANKLIN</b>					4p. Collap. Coupe	2195	2	3185	aghnmx	4p. Spt. Touring..	2850	..	3972	aeghklmnp	5p. Town Coupe..	3195	2	4452	aeghlnprx
<b>"11-B"</b>					4p. Perm. Coupe..	2195	2	3185	aghnmx	4p. Collap. Coupe.	3000	2	3780	aeghklmnp	2p. Coupe.....	3485	2	4373	aeghlnprx
3p. Spt. Rdster...	\$2690	2	3015	aeghklrx	5p. Victoria.....	2195	2	3275	aghnmx	5p. Sedan.....	2850	4	3950	aeghklmnp	4p. Victoria....	3485	2	4346	aeghlnprx
5p. Touring.....	2635	4	2975	aeghklprx	5 Sedan.....	2195	4	3300	aghnmx	5p. Brougham....	3565	4	4525	aeghlnprx	5p. Sedan.....	3565	4	4498	aeghlnprx
3p. Coupe.....	2490	2	3105	aeghklprx	<b>"AA"</b>					7p. Sedan.....	3640	4	4620	aeghlnprx	5p. Cus. Sedan..	3960	4	4515	aeghlnprx
3-5p. Coupe.....	2565	2	3150	aeghklprx	2-4p. Playboy....	2345	2	3200	aghnmx	5p. Collap. Coupe.	3500	4	4140	aeghklmnp	7p. Cus. Sedan..	4075	4	4678	aeghlnprx
4p. Victoria....	2740	2	3165	aeghklprx	2-4p. Sp. Coupe...	2495	2	3340	aghnmx	7p. Sub. Sedan...	3500	4	4280	aeghklmnp	7p. Cus. Limou..	4175	4	4718	aeghlnprx
5p. Sedan.....	2790	4	3230	aeghklprx	4p. Cus. Vict....	2495	2	3470	aghnmx	<b>"48"</b>					<b>MOON "6-60"</b>				
5p. Ox. Sedan....	2815	4	3230	aeghklprx	5p. Cus. Sedan...	2495	4	3470	aghnmx	4p. Sportif.....	\$	4	5030	afghklrx	3p. Roadster....	\$925	2	2295	an
5-7p. Sedan.....	2840	4	3240	aeghklprx	<b>KISSEL "6-55"</b>					Roadster.....	4	5330	afghklrx	5p. Phaeton....	995	4	2340	an	
5p. Spt. Sedan...	2910	4	3305	aeghklprx	124" W.B.	\$1685	4	3020	ahmnr	7p. Touring.....	\$	4	5330	afghklrx	3-5p. DeL. Rdstr.	1095	2	2330	an
7p. Limousine...	2940	4	3360	aeghklprx	5p. Phaeton.....	1895	2	3160	ah	7p. Tour Lim....	\$	4	5640	afghklrx	3-5p. Roy. Cab..	1295	2	2575	an
<b>GARDNER</b>					4p. Speedster....	1895	2	3160	ah	5p. Vic. Sedan....	\$	4	5600	afghklrx	3-5p. Cab. Rdstr.	1195	2	2575	an
<b>"75"</b>					4p. Coupe Rd....	1895	2	3483	ahmnr	7p. Lim. Enc. Dr.	\$	4	5868	afghklrx	5p. Coach.....	1045	2	2420	an
5p. Sp. Coupe....	\$1475	2	3290	Aghjmnr	5p. Spec. Bro'm..	1795	2	3486	ah	7p. Cabriolet....	\$	4	5624	afghklrx	5p. 2d. Sedan...	1145	2	2520	an
5p. Sedan.....	1490	4	3285	Aghmnr	5p. Bro'm Sedan..	1895	4	3440	ah	4p. Sportif.....	5900	4	4475	aeghklmnp	5p. Roy. Sedan..	1195	2	2520	an
<b>"80"</b>					5p. Conv. Bro'm..	2295	..	3378	..	4p. Roadster....	5900	2	4370	aeghklmnp	5p. 4d. Sedan...	1245	4	2605	an
4p. Roadster....	1595	2	3030	Aeghmnr	131" W.B.	1785	4	3660	ah	7p. Touring.....	6000	..	..	aeghklmnp	5p. Roy. Sedan..	1295	4	2605	ahn
5p. Spt. Coupe...	1745	2	3375	Aeghmnr	4p. Tourster....	1895	4	3225	ahmnr	5p. Vic. Sedan...	7300	4	4842	afghimprx	5p. Cust. Sedan.	1395	4	2605	ah
4p. Vic. Coupe...	1743	2	3375	Aeghmnr	5p. Bro'm Sedan..	2095	4	3596	ah	7p. Suburban....	7500	4	4930	afghimprx	<b>"A"</b>				
5p. Sedan.....	1795	4	3370	Aeghmnr	7p. Sedan.....	2295	..	3770	ahmnr	... Vic. Sed....	7450	..	..	aeghklmnp	5p. Touring.....	1195	4	2560	an
<b>"85"</b>					<b>"8-4"</b>					5p. Vic. Sedan...	7300	4	4842	afghimprx	5p. Roy. Rdstr..	1395	2	2600	an
4p. Roadster....	1695	2	3040	Aeghmnr	125" W.B.	1885	4	3240	ahmnr	7p. Touring.....	6000	..	..	aeghklmnp	5p. Collap. Cab..	1795	..	..	..
5p. Spt. Coupe...	1845	2	3385	Aeghmnr	4p. Speedster....	2095	2	3155	ahmnr	5p. Vic. Sedan...	7300	4	4842	afghimprx	5p. Sedan DeL...	1395	2	2710	an
4p. Vic. Coupe...	1845	2	3385	Aeghmnr	4p. Cp. Rdstr....	2095	2	3343	ahmnr	7p. Suburban....	7500	4	4930	afghimprx	5p. Sedan DeL...	1545	4	2860	an
5p. Brougham....	1895	4	3360	Aeghmnr	5p. Spec. Bro'm..	1995	2	3345	ahmnr	... Vic. Sed....	7450	..	..	aeghklmnp	... Spec. Sedan.	1545	4	..	..
5p. Sedan.....	1895	4	3380	Aeghmnr	5p. Bro'm Sedan..	2095	4	3400	ahmnr	7p. Town Bro'm..	7500	4	4615	afghimprx	<b>NASH</b>				
<b>"88"</b>					5p. Conv. Bro'm..	2495	..	3518	ahmnr	7p. Cabriolet....	7500	4	4615	afghimprx	<b>"Std. 6"</b>				
5p. Touring.....	1795	4	3330	Aeghmnr	132" W.B.	1985	4	3360	ahmnr	... Collap. Cab..	7750	..	..	aeghklmnp	5p. Touring.....	\$865	4	2325	Dghnr
7p. Touring.....	1795	4	3330	Aeghmnr	7p. Touring.....	2095	4	3155	ahmnr	5p. Vic. Sedan...	7300	4	4842	afghimprx	2p. Coupe.....	875	2	2345	Dghnr
<b>"90"</b>					4p. Tourster....	2095	4	3155	ahmnr	7p. Suburban....	7500	4	4930	afghimprx	5p. Sedan.....	895	2	2450	Dghnr
4p. Roadster....	1995	2	3400	Deghmnr	5p. Bro'm Sedan..	2295	4	3455	ahmnr	... Vic. Sed....	7450	..	..	aeghklmnp	5p. Sedan.....	895	2	2450	Dghnr
4p. Land. Rdstr..	229	2	3475	Deghmnr	7p. Sedan.....	2495	..	3630	ahmnr	5p. Coach Bro'm..	3180	4	3650	afghimprx	5p. Land. Sedan..	1085	4	2610	Deghnr
5p. Victoria.....	2295	4	3690	Deghmnr	<b>"8-90"</b>					4p. Roadster....	\$3050	2	3400	Ceghmnrpx	<b>"Special"</b>				
5p. Brougham....	2295	4	3690	Deghmnr	5p. Phaeton.....	2185	4	3220	ahmnr	5p. Touring.....	2630	4	3400	afghmnr	4p. Roadster....	1225	2	2980	Dghnr
5p. Sedan.....	2295	4	3730	Deghmnr	4p. Speedster....	2395	2	3360	ahmnr	4p. Sp. Phaeton..	3180	4	3400	afghimprx	5p. Touring.....	1135	4	2980	Dghnr
<b>HUDSON</b>					4p. Cpe. Rdstr..	2395	2	3578	ahmnr	3p. Coupe.....	3180	2	3650	afghimprx	4p. Cabriolet....	1290	4	3070	Dghnr
<b>"Super Six"</b>					5p. Spec. Bro'm..	2295	2	3671	ahmnr	5p. Sedan.....	3180	4	3650	afghimprx	2p. Bus. Coupe..	1165	2	3030	Dghnr
<b>"Std. Line"</b>					5p. Bro'm Sedan..	2395	4	3760	ahmnr	5p. Sedan.....	3180	4	3650	afghimprx	5p. Sedan.....	1215	2	3150	Dghnr
5p. Coach.....	\$1285	2	3505	aghjmnr	5p. Conv. Bro'm..	2795	..	3863	ahmnr	5p. Coach Bro'm..	3180	4	3650	afghimprx	5p. Sedan.....	1335	4	3250	Dghnr
5p. Sedan.....	1385	4	3620	aghjmnr	139" W.B.	2285	4	3630	ahmnr	5p. Town Car....	4600	4	3750	afghimprx	<b>"Advanced"</b>				
<b>"Custom"</b>					7p. Touring.....	2285	4	3630	ahmnr	7p. Sedan.....	3280	4	3700	afghimprx	4p. Roadster....	1475	2	3400	Dghmr
7p. Phaeton....	1600	4	3565	agmnr	4p. Tourster....	2295	4	3335	ahmnr	7p. Sub. Sedan..	3480	4	3700	afghimprx	5p. Touring.....	1340	4	3400	Dghmr
4p. Brougham...	1575	4	3660	aghmnr	5p. Bro'm Sedan..	2595	4	3755	ahmnr	<b>"TV"</b>					5p. Sedan.....	1425	2	3620	Dghmr
7p. Sedan.....	1850	4	3870	aghmnr	7p. Sedan.....	2795	4	3975	ahmnr	2p. Roadster....	5800	2	4000	Aeghlmnrpx	5p. Sedan.....	1545	4	3650	Dghmr
<b>"S"</b>					5p. Sedan DeL...	2985	4	3910	aghimorvx	4p. Spt. Tour....	5600	4	4600	Ceghlmnrpx	5p. Touring.....	1340	4	3400	Dghmr
5p. Coach.....	1175	2	3510	aghjmnr	7p. Sedan DeL...	3495	4	4080	aghimorvx	5p. Tour. Sedan..	6720	4	5200	Cfghlmnrpx	5p. Sedan.....	1425	2	3620	Dghmr
5p. Sedan.....	1285	..	3590	aghjmnr	7p. Ber. Sedan...	3585	4	4125	aghimorvx	7p. Sub. Sedan..	6920	4	..	Ceghlmnrpx	5p. Sedan.....	1545	4	3650	Dghmr
<b>HUPMOBILE</b>					<b>LA SALLE</b>					4p. Roadster....	\$3050	2	3400	Ceghmnrpx	<b>121" W.B.</b>				
<b>"A-5"</b>					125" W.B.	\$2525	2	3702	aeghlmnrpx	5p. Touring.....	2630	4	3400	afghmnr	4p. Roadster....	1475	2	3400	Dghmr
5p. Touring.....	\$1325	4	2620	aghn	2-4p. Roadster..	2495	4	3716	aeghlmnrpx	4p. Spt. Tour....	5600	4	4600	Ceghlmnrpx	5p. Touring.....	1340	4	3400	Dghmr
2-4p. Roadster..	1385	2	2660	aghn	4p. Sp. Phaeton..	2995	4	..	Beghklmnp	5p. Tour. Sedan..	6720	4	5200	Cfghlmnrpx	5p. Sedan.....	1425	2	3620	Dghmr
2-4p. Coupe.....	1385	2	2800	aghn	2-4p. Coupe....	2585	2	3834	aeghlmnrpx	7p. Touring.....	5700	4	5200	afghimprx	5p. Sedan.....	1545	4	3650	Dghmr
5p. Sedan.....	1385	4	2800	aghn	2-4p. Conv. Cpe..	2635	2	..	aeghlmnrpx	7p. Sedan.....	6720	4	..	afghimprx	5p. Touring.....	1340	4	3400	Dghmr
5p. Brougham...	1385	2	2890	aghn	4p. Victoria....	2635	2	3795	aeghlmnrpx	7p. Sub. Sedan..	6920	4	..	Ceghlmnrpx	5p. Sedan.....	1425	2	3620	Dghmr
<b>"E-3"</b>					5p. Town Sedan..	2650	4	..	..	4-6p. Town Car..	9000	4	5200	Cfghlmnrpx	5p. Touring.....	1340	4	3400	Dghmr
5p. Touring.....	1795	4	3300	aghnrx	5p. Sedan.....	2685	4	4063	aeghlmnrpx	<b>MCFARLAN</b>					5p. Touring.....	1340	4	3400	Dghmr
7p. Touring.....	1395	4	3360	aghnrx	... Coupe.....	3600	..	..	..	<b>"Str. 8"</b>					5p. Touring.....	1340	4	3400	Dghmr
2-4p. Roadster..	1895	2	3355	aghnrx	5p. Sedan.....	3800	..	..	..	<b>"131" W.B.</b>					5p. Sedan.....	1425	2	3620	Dghmr
5p. Brougham...	2095	2	3515	aghnrx	... Town Cab....	4500	..	..	..	<b>"TV"</b>					5p. Sedan.....	1545	4	3650	Dghmr
2-4p. Coupe.....	2195	2	3465	aghnrx	... Trans. Cab....	4700	..	..	..	<b>"8-90"</b>					5p. Touring.....	1440	4	3500	Dghmr
5p. Sedan.....	2195	4	3545	aghnrx	7p. Sedan.....	2795	..	..	..	<b>2p. Roadster....</b>					5p. Sp. Touring..	1540	4	3500	Bghimr
5p. Victoria....	2195	2	3525	aeghnrx	5p. Imp. Sedan...	2795	..	..	..	<b>4p. Spt. Tour....</b>					4p. Victoria....	1595	2	3640	Dghmr
7p. Sedan.....	2345	4	3360	ehr	7p. Imp. Sedan...	2895	..	..	..	<b>5p. Tour. Sedan..</b>					4p. Coupe.....	1775	2	3650	Dghmr
7p. Sedan Lim...	2520	4	3360	aehnrx	<b>LINCOLN</b>					5p. Cus. Sedan..	2595	4	3119	aeghlmnrpx	5p. Amb. Sedan..	1925	4	3820	Dghmr
<b>JORDAN</b>					<b>"8"</b>					5p. Cus. Sedan..	2595	4	3172	aeghlmnrpx	7p. Sedan.....	1990	4		



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Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment	Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment	Passenger and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment	Passengers and Model	F.O.B. Price	Doors	Shipping Weight	Standard Equipment					
OVERLAND					7p. Limousine.....	2695	4	3750	aghlmnrvtx	ROAMER					2p. Coupe.....	1195	2	3120	deghlmnr					
5p. Touring.....	\$625	4	1985	ag	5p. DeL. Sedan.....	2785	4	3600	aghlmnrvtx	2p. Roadster.....	\$1495	2	.....	.....	4p. Coupe.....	1295	2	3165	deghlmnr					
2-4p. Roadster.....	665	2	1930	agh	7p. DeL. Sedan.....	2995	4	3700	aghlmnrvtx	4p. Coupe.....	1495	2	.....	.....	4p. Victoria.....	1295	2	3165	degl l nmr					
2p. Coupe.....	625	2	2025	ag	"6-80"					5p. Sedan.....	1795	.....	.....	.....	5p. Sed n Plush.....	1195	1	3235	deghlmnr					
5p. Coach.....	625	2	2075	ag	5p. Phaeton.....	1395	4	2850	aghlmnrw	5p. Sedan.....	1795	.....	.....	.....	5p. Sedan Mohair.....	1295	1	3235	d-ghlmnr					
5p. Sedan.....	725	4	2185	agh	2-4p. Roadster.....	1495	2	3025	aghlmnrw	2p. Coupe.....	\$1985	2	3410	ag	"Commander"									
5p. Landau.....	755	4	2230	agh	2-4p. Coupe.....	1565	2	2975	aghlmnrw	5p. Brougham.....	1985	2	3440	ag	4p. Roadster.....	1595	2	3330	deghlmnr					
"6" Whippet					5p. 2d. Sedan.....	1395	2	3000	aghlmnrw	5p. Sedan.....	1985	4	3570	ag	2p. Coupe.....	1495	2	3395	deghlmnr					
2-4p. Roadster.....	825	2	2225	agh	5p. Std. Sedan.....	1595	4	3125	aghmnr.	5p. Sedan.....	1985	4	3570	ag	4p. Victoria.....	1495	2	3510	deghlmnr					
5p. Touring.....	765	4	2270	agh	5p. Spt. Sedan.....	1795	4	3100	.....	5p. Tourer.....	2495	4	3650	cg	5p. Sedan.....	1495	4	3570	deghlmnr					
2p. Coupe.....	795	2	2305	agh	5p. DeL. Sedan.....	1795	4	3125	Deghlmnrw	5p. Sedan.....	2985	4	3880	cg	4p. Cpe Regal.....	1625	2	3465	deghlmnr					
5p. Coach.....	795	2	2405	agh	"6-90"					7p. Sedan.....	3285	4	3980	cg	4p. Vic. Regal.....	1625	2	3525	deghlmnr					
5p. Sedan.....	875	4	2440	agh	5p. Pha'e on.....	1695	4	2930	aghlmnrw	ROLLS ROYCE					5p. Sed. Regal.....	1625	4	35 5	deghlmnr					
5p. Landau.....	925	4	2490	aght	2-4p. Roadster.....	1695	2	2960	aghlmnrw	"St. Ghost"					"President"									
PACKARD					4p. Coupe.....	1725	2	3050	aghlmnr	Open Models.....	.....	.....	.....	.....	7p. Tourer.....	1795	4	3805	degl l nmrpx					
4p. Runabout.....	\$2275	2	3545	Deghlmnrpx	4p. Sedan.....	1895	2	3150	aghlmnr	Closed Models.....	.....	.....	.....	.....	7p. Sedan.....	1985	4	4050	degl l nmrpx					
5p. Phaeton.....	2275	4	3550	Deghlmnrpx	5p. Landau.....	1995	4	3250	aghlmnr	"New Phan"					7p. Limousine.....	2250	4	4080	deghlmnrpx					
5p. Sedan.....	2285	4	3925	Deghlmnrpx	133 1/2" W.B.					Open Models.....	.....	.....	.....	.....										
"533"					2-4p. Roadster.....	2995	2	3650	Deghlmnrx	Closed Models.....	.....	.....	.....	.....										
5p. Phaeton.....	2385	.....	.....	.....	7p. Sedan.....	3095	2	3675	Deghlmnrpx	STAR "4"					STUTZ "AA"									
4p. Runabout.....	2385	.....	.....	.....	5p. Sedan.....	3495	4	3950	Deghlmnrpx	2p. Con. Rdstr.....	\$550	2	1850	a	131" W.B.									
7p. Touring.....	2485	4	3790	Deghlmnrpx	7p. Sedan.....	3595	4	4050	Deghlmnrpx	5p. Touring.....	550	4	1920	a	2-4p. Sp'dster.....	\$3350	2	4058	aghlmnrpxw					
4p. Coupe.....	2685	2	3925	deghlnt	5p. Ber. Lim.....	3795	4	4100	Deghlmnrpx	5p. Coupe.....	650	2	1965	ah	4p. Speedster.....	3360	4	4175	aghlmnrpxw					
5p. Club Sedan.....	2685	4	4015	Deghlmnrpx	PIERCE ARROW					5p. Coach.....	675	2	2120	ah	2p. Viet. Coupe.....	3375	2	4176	aghlmnrpx					
7p. Sedan.....	2685	4	4070	Deghlmnrpx	"80"					5p. Sedan.....	765	4	2200	ah	5p. Brougham.....	3395	4	4334	aghlmnrpx					
7p. Sedan Lim.....	2785	4	4130	Deghlmnrpx	2p. Runabout.....	\$2495	2	3285	afghlrx	STAR "4"					5p. Sedan.....	3395	4	4340	aghlmnrpx					
4p. Runabout.....	3975	.....	.....	.....	7p. Phaeton.....	2895	4	3440	afghlrx	2p. Con. Rdstr.....	\$550	2	1850	a	5p. Land. Sedan.....	3545	4	4280	aghlmnrpx					
5p. Phaeton.....	3975	.....	.....	.....	4p. Phaeton.....	3095	4	3300	afghlrx	5p. Touring.....	550	4	1920	a	7p. Sedan.....	3885	4	4656	aghlmnrpx					
7p. Touring.....	4050	4	4250	Deghlmnrpx	4p. Conv't Coupe	3350	2	.....	afghlrx	5p. Coupe.....	650	2	1965	ah	7p. Sedan Lim.....	3985	4	4731	aghlmnrpx					
4p. Coupe.....	4950	.....	.....	.....	5p. Brougham.....	2495	2	3470	afghlrx	5p. Coach.....	675	2	2120	ah	"AA DeLuxe"									
5p. Club Sedan.....	4950	4	4550	Deghlmnrpx	5p. Sport Land.....	3025	4	3700	afghlrx	5p. Sedan.....	765	4	2200	ah	131" W.B.									
7p. Sedan.....	5150	4	4660	Deghlmnrpx	2p. Coupe.....	3100	2	3405	afghlrx	"e"					2p. Speedster.....	3450	2	4058	aghlmnrpxw					
7p. Sedan Lim.....	5250	4	4700	Deghlmnrpx	5p. Std. Sedan.....	2895	4	3525	afghlrx	2-4p. Roadster.....	885	2	2140	aghlmnrw	4p. Speedster.....	3460	4	4175	aghlmnrpxw					
PAIGE "6-45"					7p. Std. Sedan.....	3350	4	3820	afghlrx	2-4p. Cabriolet.....	915	2	2260	aghlmnrw	"AA Custom"									
5p. Touring.....	\$1095	4	.....	aghnrx	2-4p. Coupe.....	3200	2	3450	afghlrx	5p. Coach.....	795	2	2145	ahmr	131" W.B.									
2p. Coupe.....	1095	2	2525	aghnrx	5p. Club Sedan...	3300	4	3565	afghlrx	5p. Sedan.....	825	4	2340	ahmr	2p. Black Hawk.....	4885	2	.....	.....					
4p. Cab. Rdster...	1195	2	2615	aghnrx	5p. Club Land.....	3400	4	3570	afghlrx	5p. Land. Sedan...	975	4	2335	ahmrt	4p. Black Hawk.....	4935	2	.....	aghlmnrpx					
5p. Brougham...	1095	2	2660	aghnrx	7p. Encl. Dr. Lim.	3450	4	3680	afghlrx	2-4p. Sp. Coupe...	975	2	2295	aghlmnr	2-4p. Cab. Coupe	3895	2	.....	aghlmnrpx					
5p. Sedan.....	1195	4	2760	aghnrx	4p. Coupe.....	3250	2	3420	afghlrx	STEARNS-KNIGHT					5p. Pr. Wales Sed.	6345	4	.....	.....					
"6-45A"					5p. Del. Sedan...	3895	4	3500	afghlrx	"F-6-85"					5p. Wey. Sedan...	5185	4	.....	.....					
5p. Brougham...	995	.....	.....	.....	7p. Lim. Encl...	4045	4	3660	afghlrx	4p. Roadster.....	\$3250	2	4252	aghklmnrpx	7p. Cab. T'n Car	6895	4	.....	aghlmnrpx					
5p. Sedan.....	1095	.....	.....	.....	"36"					4p. Touring.....	3250	4	4322	aghklmnrpx	VELIE									
"6-65"					2p. Runabout...	5875	2	4560	afghlrx	4p. Cab. Rdstr...	3550	2	4500	aghklmnrpx	"Std. 50"									
4p. Roadster.....	1395	2	3055	aghlmnrw	4p. Touring.....	5875	4	4510	afghlrx	5p. Cus. Sedan...	3350	4	4562	aghklmnrpx	2-4p. Roadster...	\$1165	.....	.....	.....					
5p. Brougham...	1395	2	3215	aghlmnr	7p. Touring.....	5875	4	4585	afghlrx	4p. Coupe.....	3450	2	4527	aghklmnrpx	3p. Coupe.....	1165	2	2730	aghkmr					
5p. Land. Bro'm...	1395	2	3115	aghlmnr	7p. Sedan.....	5875	4	4815	afghlrx	5p. Std. Sedan...	3450	4	4572	aghklmnrpx	5p. Sedan.....	1165	4	2810	aghkmr					
5p. Sedan.....	1495	4	3280	aghlmnrux	7p. Lim. Encl...	5875	4	4870	afghlrx	5p. Sedan Lim...	3700	4	4647	aghklmnrpx	5p. Met. Sedan...	1325	.....	.....	eghk					
"6-75"					3p. Coupe.....	6375	2	4760	afghlrx	7p. Sedan.....	3750	4	4702	aghklmnrpx	"Spec. 60"									
7p. Touring.....	1655	4	3420	aghlmnrux	4p. Cpe. Sedan...	6375	2	4795	afghlrx	7p. Sedan Lim...	3950	4	4777	aghklmnrpx	5p. Club Ph'tn...	1450	4	3025	aghlmnrpx					
4p. Cab. Rdster...	1895	2	3540	deghlmnrux	4p. Sedan.....	6375	4	4830	afghlrx	"G8-85"					4p. Coupe.....	1585	2	3260	aghlmnrux					
5p. Sedan.....	1695	4	3550	aghlmnrux	7p. Encl. Dr. Lan.	6000	4	4895	afghlrx	4p. Roadster.....	3950	2	4448	aghklmnrpx	5p. Spec. Sedan...	1585	4	3335	aghlmnrux					
4p. Coupe.....	1895	2	3550	aghlmnrux	4p. Sedan Land...	6000	4	4845	afghlrx	4p. Touring.....	3950	4	4633	aghklmnrpx	5p. Royal Sedan...	1635	4	3350	aghlmnrux					
7p. Sedan.....	1995	4	3765	deghlmnrux	4p. Encl. Land...	6600	4	4880	afghlrx	4p. Cabriolet...	4550	2	4717	aghklmnrpx	WILLIS-KNIGHT									
7p. Limousine...	2145	4	3805	deghlmnrux	7p. Fr. Limou...	7500	4	4740	afghlrx	4p. Coupe.....	4550	2	4882	aghklmnrpx	"66-A"									
"8-85"					7p. Fr. Landau...	8000	4	4865	afghlrx	5p. Sedan.....	4650	4	4934	aghklmnrpx	2p. Roadster.....	\$1850	2	3645	aghnrx					
7p. Touring.....	2195	4	3570	aghlmnrpx	PONTIAC "6"					"The Dictator"					5p. Touring.....	1850	4	3684	aghnrx					
5p. Sedan.....	2255	4	3700	aghlmnrpx	2-4p. Roadster...	\$745	2	2160	ah	5p. Du Phaeton...	1195	4	3090	deghlmnr	2-4p. Cab C'pe...	1995	2	3700	aghnrx					
4p. Coupe.....	2495	2	3700	aghlmnrpx	2p. Coupe.....	745	2	2275	ah	7p. Tourer.....	1245	4	3090	deghlmnr	4p. Foursome.....	2095	4	3975	aghnrpx					
4p. Cabriolet...	2495	2	3690	aghlmnrpx	5p. 2d. Sedan...	745	2	2375	ah	4p. Roadster.....	1245	2	3040	deghlmnr	5p. Sedan.....	1995	4	3975	aghnrtx					
7p. Sedan.....	2525	4	3910	aghlmnrpx	4p. Sport Cab...	795	2	2345	a						135" W.B.									
7p. Limousine...	2665	4	3950	aghlmnrpx	5p. Land. Sedan...	845	4	2460	ah						7p. Touring.....	2495	4	.....	.....					
PEERLESS					5p. DeL. Landau...	925	4	2510	agh						7p. Sedan.....	2850	4	4075	aghnrtx					
2-4p. Roadster...	\$1295	2	2600	adeghlmnr	REO "A"					STUDEBAKER					7p. Limousine...	2950	4	4075	.....					
2-4p. C'pe Rdstr...	1345	4	2725	adeghlmnr	2p. Roadster.....	\$1685	2	3300	aghnr	"The Dictator"					"70-A"									
5p. Sedan.....	1345	4	2895	adeghlmnr	... Brougham...	1685	2	3425	aghnr	5p. Tourer.....	\$1165	4	3090	deghlmnr	2-4p. Roadster...	1350	2	2965	aghnrx					
"6-72"					2p. Sp. Coupe...	1625	2	3320	aghnr	5p. Du Phaeton...	1195	4	3090	deghlmnr	5p. Touring.....	1295	4	2900	aghnrx					
126 1/2" W.B.	2295	2	3400	aghlmnrvtx	4p. Victoria.....	1845	2	3350	aghnr	7p. Tourer.....	1245	4	3090	deghlmnr	2p. Coupe.....	1295	2	3395	aghnrx					
5p. Coupe.....	2395	4	3475	aghlmnrvtx	... Sedan.....	1845	4	3550	aghnr	4p. Roadster.....	1245	2	3040	deghlmnr	5p. Coach.....	1295	2	3310	aghnrx					
133 1/2" W.B.	1995	4	3175	aghlmnrpx	... DeL. Sedan...	1995	4	3550	aghnr						2-4p. Cab Coupe...	1495	2	2880	aghnrx					
7p. Phaeton.....	1995	4	3175	aghlmnrpx	5p. Brougham...	1195	2	2960	aghnr						5p. Sedan.....	1495	4	3105	aghnrt					
2-4p. Roadster...	2195	2	3300	aghlmnrvtx																				
7p. Sedan.....	2595	4	3675	aghlmnrvtx																				

# Mechanical Specifications of Current Passenger Car Models

This list comprises current cars distributed on a national basis only. Data for previous models back to 1920 will be found in the Chilton Catalog and Directory

MAKE AND MODEL	ENGINE										ELECTRICAL SYSTEM		Clutch—Type and Make	Gear Set—Make	Universal—Type and Make	REAR AXLE		BRAKES		Steering Gear—Make	Rear Springs—Type and Make	Chassis Lubrication—Type and Make	ABBREVIATIONS—NAMES OF PARTS OF STOCK PARTS				
	Wheel Base (Inches)	Displacement (Inches)	Model	Number of Cyls.	Rated H.P.	Piston Displacement	Valve Arrangement	Camshaft Drive	Platen Material	No. Main Bear.	Damper	Oil System				Cooling System	Thermostat?	Radiator?	Shut-off?					Carburetor	Air Cleaner?	Ignition System	Generator and Starter Make
Auburn.....	120	285x.25	Con.	28L	19.8	185	Ch.	Ch.	Ch.	4	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-9	Col.	Pr-Al	A-Bas—American Bosch
Auburn.....	125	295x.25	Lyc.	CT	24.2	228	Ch.	Ch.	Ch.	4	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-7	Col.	Pr-Al	Ada—Adams
Auburn.....	130-147	316x.00	Lyc.	AHM	33.8	289	Ch.	Ch.	Ch.	4	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-45	Col.	Pr-Al	A-K—Auto-Kent
Buick.....	114 1/2	315x.25	Own.	AHM	23.4	207	Ch.	Ch.	Ch.	4	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-9	Col.	Pr-Al	Al—Alumite
Buick.....	120-128	336x.00	Own.	AHM	29.4	274	Ch.	Ch.	Ch.	4	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-72	Col.	Pr-Al	Alm—Almetal
Cadillac.....	140	326x.75	Own.	Big 6	35.0	341	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-9	Col.	Pr-Al	B&B—Borg & Beck
Chandler.....	124	326x.00	Own.	Big 6	28.4	289	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-45	Col.	Pr-Al	B-L—Brown-Lipe
Chandler.....	108 1/2	306x.00	Own.	Sidd 6	33.8	314	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-45	Col.	Pr-Al	Ba—Basic caps
Chandler.....	124	326x.00	Own.	Sidd 6	21.6	170	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-45	Col.	Pr-Al	Car—Carter
Chandler.....	124	326x.00	Own.	Sidd 6	33.8	314	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-45	Col.	Pr-Al	CAS—CAS Products
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6	Y	Y	Y	Y	Y	Y	Y	Y	D-R	D-R	P.Long.	War.	Col.	4-18	Col.	Pr-Al	Cle—Cleveland
Chrysler.....	185-198 1/2	306x.75	Own.	Cap	28.4	288	Ch.	Ch.	Ch.	6</																	



✦ ✦ ✦ Now the New Cadillac  
joins with the La Salle in  
strengthening still further the  
business of Cadillac-La Salle  
dealers throughout America

Instant and nation-wide approval of the Cadillac joined with the ever-mounting success of the La Salle, writes a brilliant new page in motor car manufacturing and merchandising.

Never before has one company produced two cars so brilliant and impressive in performance, in appearance, in comfort and in value—so completely in accord with the desires of the motor car buying public.

Quite naturally, never before has the

public expressed such admiration for two cars in the higher priced field, and such eagerness for ownership.

It is obvious that merchandise so appealing as Cadillac and La Salle motor cars must result in successful business for every dealer holding a Cadillac-La Salle franchise.

In this connection, it will interest dealers to know that applications for franchises always receive complete and careful consideration by the Cadillac Motor Car Company.

CADILLAC MOTOR CAR COMPANY

Detroit, Michigan

Oshawa, Canada

Division of General Motors Corporation



## Mechanical Specifications of Current Passenger Car Models—Continued

MAKE AND MODEL	Wheel Base (Inches)	Tire Size	Decimals-Balloons	ENGINE										ELECTRICAL SYSTEM			REAR AXLE			BRAKES		Steering Gear—Make	Rear Springs—Type and Length	Chassis and Lubrication—Type and Make	ABBREVIATIONS— NAMES OF MFRS. OF STOCK PARTS				
				Model	Number of Cyls.	Bore and Stroke	Nat'l. H.P.	Rated H.P.	Piston Dis- placement	Valve Arrange- ment	Camshaft Drive	Piston Material	No. Main Bear.	Crankshaft Vibra- tion Damper?	Oiling System	Cooling System	Thermos- tat	Radiators?	Carburetor	Air Cleaner?	Ignition System					Generator and Starter Make	Clutch—Type and Make	Gear Set—Make	Universal—Type and Make
8-70 Locomobile	122	31x6.00	Cont..... 8-27x4 1/2	26.4	247	Ch. Al.	Ch. Al.	5	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	Delco	Delco	Delco	P. B&B.	Delco	m-Spi.	4.77 I-F	I-R	Ros.	S-58	Pr-Ze	A-Bos—American-Bosch
8-80 Locomobile	130	32x6.00	Lyc. Spc. 48 6-41x4 1/2	33.8	299	Ch. Al.	Ch. Al.	5	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	Delco	Delco	Delco	P. B&B.	Delco	m-Spi.	4.81 I-F	I-R	Ros.	S-58	Pr-Ze	A-K—Atwater Kent
8-88 Locomobile	142	33x6.00	Own..... 48 6-41x4 1/2	48.6	525	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	Delco	Delco	Delco	P. B&B.	Delco	m-Spi.	4.81 I-F	I-R	Ros.	S-60	Pr-Ze	Ada—Adams
8-90 Locomobile	138	33x6.75	Own..... 90 6-37x4 1/2	36.0	372	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	Delco	Delco	Delco	P. B&B.	Delco	m-Spi.	4.81 I-F	I-R	Ros.	S-60	Pr-Ze	Alm—Almetal
Little Marmen	116	29x5.25	Own..... 8-24x4 1/2	24.2	190	Ch. Al.	Ch. Al.	5	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-56	Pr-Ze	B&B—Borg & Beck
E-75 Marmen	136	32x6.75	Own..... E-75 6-37x4 1/2	33.8	340	Ch. Al.	Ch. Al.	5	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-56	Pr-Ze	B&B—Borg & Beck
St. 8 McFarlan	131-136	33x6.20	Lyc. 4H 8-37x4 1/2	33.8	299	Ch. Al.	Ch. Al.	5	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-56	Pr-Ze	B&B—Borg & Beck
TV McFarlan	141	33x6.75	Own..... TV 6-37x4 1/2	48.6	575	Ch. Al.	Ch. Al.	5	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-56	Pr-Ze	B&B—Borg & Beck
Series A Meon	113	30x5.25	Con..... 72 6-37x4 1/2	23.4	196	Ch. Al.	Ch. Al.	4	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-54	Pr-Al	Bar—Borg & Beck
6-40 Meon	110	30x5.25	Con..... 72 6-37x4 1/2	19.8	185	Ch. Al.	Ch. Al.	4	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-54	Pr-Al	Bar—Borg & Beck
Std. Six Nash	108 1/2	30x5.00	Own..... 32 6-37x4 1/2	23.4	184	Ch. Al.	Ch. Al.	4	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-54	Pr-Al	CAS—Cleveland
Advanced Nash	121-127	32x6.00	Own..... 31 6-37x4 1/2	25.3	279	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-54	Pr-Al	CAS—Cleveland
Special Nash	112 1/2	30x5.00	Own..... OS 6-37x4 1/2	25.3	224	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-54	Pr-Al	Can—Continental
30E Oldsmobile	117	29x5.00	Own..... 31 6-37x4 1/2	25.3	212	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Spi.	4.77 I-F	I-F	Ros.	S-54	Pr-Al	Can—Continental
30E Oldsmobile	110 1/2	31x5.25	Own..... 30E 6-37x4 1/2	19.8	185	Ch. Al.	Ch. Al.	3	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.73 I-F	I-F	Ros.	S-52	Pr-Ze	Cal—Campbell
Whippet Overland	100 1/2	28x4.75	Own..... 90 6-37x4 1/2	15.6	134	Ch. Al.	Ch. Al.	3	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.89 I-F	I-F	Ros.	S-50	Pr-Al	De—Dawson
(6) Whippet Overland	109 1/2	29x4.75	Own..... 90 6-37x4 1/2	15.6	134	Ch. Al.	Ch. Al.	3	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	5.11 I-F	I-F	Ros.	S-51	Pr-Al	De—Dawson
526-533 Packard	120-133	33x5.77	Own..... 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.67 I-F	I-F	Ros.	S-56	Pr-Al	De—Dawson
443 Packard	143	33x6.75	Own..... 6-37x4 1/2	39.2	385	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.33 I-F	I-F	Ros.	S-56	Pr-Al	Dyr—Dury
6-45 Packard	100	30x5.25	Con..... 191 6-27x4 1/2	19.8	185	Ch. Al.	Ch. Al.	3	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.9 I-F	I-F	Ros.	S-54	Pr-Al	Dyr—Dury
6-45 Paige	125	32x6.00	Own..... 75 6-37x4 1/2	27.3	249	Ch. Al.	Ch. Al.	3	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.82 I-F	I-F	Ros.	S-54	Pr-Al	Dyr—Dury
6-45 Paige	115	31x5.25	Own..... 65 6-37x4 1/2	25.3	249	Ch. Al.	Ch. Al.	3	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.5 I-F	I-F	Ros.	S-54	Pr-Al	Eat—Eaton
6-45 Paige	125	32x6.00	Lyc. 4H 8-37x4 1/2	25.3	289	Ch. Al.	Ch. Al.	9	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	3.66 I-F	I-F	Ros.	S-54	Pr-Al	Gen—Gemmer
6-45 Paige	116	29x5.25	Con..... Spec. 6-37x4 1/2	25.3	239	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	116	29x5.25	Con..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.42 I-F	I-F	Ros.	S-54	Pr-Al	GH—Guay & Haigh
6-45 Paige	120-133	33x6.00	Own..... 80 6-37x4 1/2	29.4	289	Ch. Al.	Ch. Al.	7	Y Y Y Y Y	PK	Y	Pu.	Y	N	Sch.	Sch.	Y	D-R	D-R	D-R	P. B&B.	D-R	m-Mec.	4.4					





## A BETTER CAR A LOWER PRICE

# \$875

TWO-DOOR SEDAN BODY BY FISHER  
f. o. b. Lansing

Never before has Oldsmobile been so thoroughly desirable, so utterly enjoyable as it is today.

To all those qualities which stamped it as a top value in the \$1000 field, are now added new smartness, new luxury, new colors and thrilling, smoother performance.

And the amazing thing about it is that all this has been added along with lower prices.

Formerly \$950, today the smarter,

finer Oldsmobile Two-Door Sedan is spectacularly priced at \$875!

All through the whole resplendent line similar sharp reductions—reaching as high as \$115—set a new pace in value giving!

These are the facts—but plain, cold facts that fall far short of doing justice to the value you see instantly recognise when you see for yourself this latest Oldsmobile triumph—a better car at a lower price.

## OLDSMOBILE SIX

PRODUCT OF GENERAL MOTORS



The manufacturer's basic policies and underlying resources outweigh all other considerations in determining the desirability of a dealership.

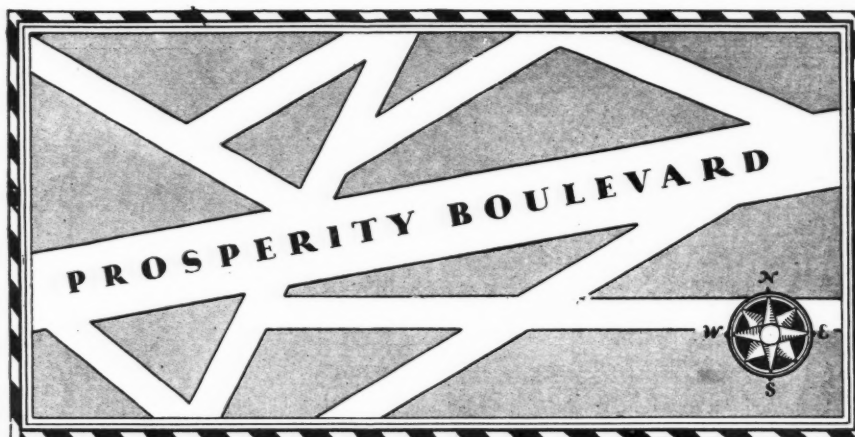
And in this light, Oldsmobile's latest triumph assumes great significance. The Oldsmobile policy . . . "that the American family may have, at a moderate investment, a car that gratifies their finer tastes as well as satisfies their every need" . . . is once more unmistakably confirmed as a policy pledged to progress.

For Oldsmobile has presented, in a manner remarkable even for General Motors, that rare achievement of value giving—a better car at a lower price!

# OLDSMOBILE



# Locate on— PROSPERITY BOULEVARD



## —where Automotive Profits Are Made

Prosperity Boulevard runs through every city, village and town in the United States. Thousands of highly successful automobile dealers occupy locations on this thoroughfare—yet many desirable sites remain.

Prominent among the dealers enjoying the advantages of Prosperity Boulevard are the hundreds of money-making automobile merchants who hold the Oakland - Pontiac Double - Profit Franchise. This franchise is their lease, assuring them of a permanent location and providing all the advantages of capable management and generous discount policy.

And while offering this protection, the Double-Profit Franchise provides them with two record-breaking lines of cars—the Pontiac Six and the Oakland All-American Six—liberal merchandising and advertising cooperation, the benefits of association with General Motors and the possibility of profits, such as those listed below.

Why not locate on Prosperity Boulevard? Why not acquire a franchise which will give you the protection and advantages enjoyed by dealers there? Fill in the coupon to obtain complete information. And be sure to mail it today!

### ON PROSPERITY BLVD!

During the first six months of 1927 typical Oakland - Pontiac dealers earned net profits such as these:

Population	State	Profit
2,510	North Carolina	\$ 9,480.13
5,183	Kansas	5,816.16
14,150	Illinois	6,393.24
36,004	Indiana	25,023.90
37,295	Ohio	17,958.77
73,502	Penna.	22,275.50

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN

## OAKLAND-PONTIAC

### *Double-Profit* Franchise

Dept. E.,  
Oakland  
Motor Car  
Co., Pontiac,  
Michigan.

Please send me,  
without obligation,  
the story of Oak-  
land-Pontiac Double-  
Profit Franchise.

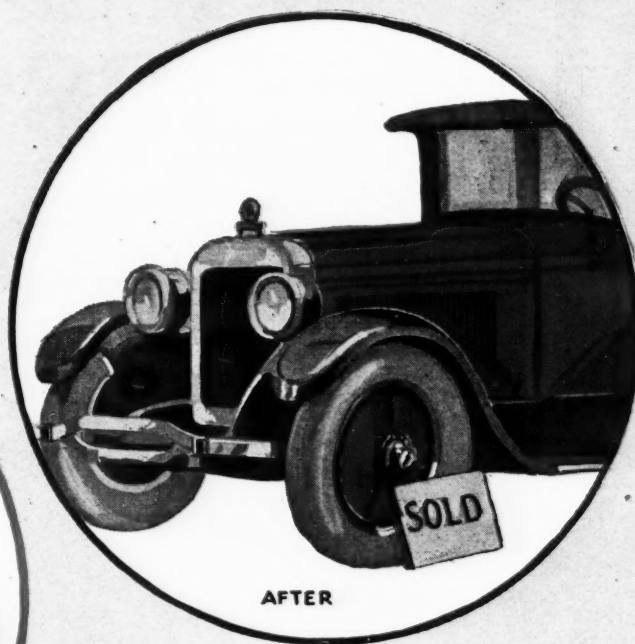
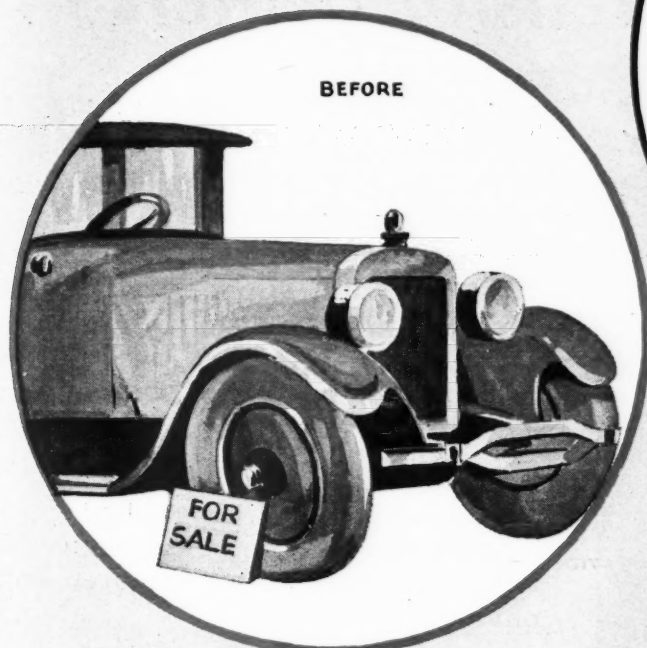
(Name).....

(St. & No.).....

(City & State).....



# USED CARS AND

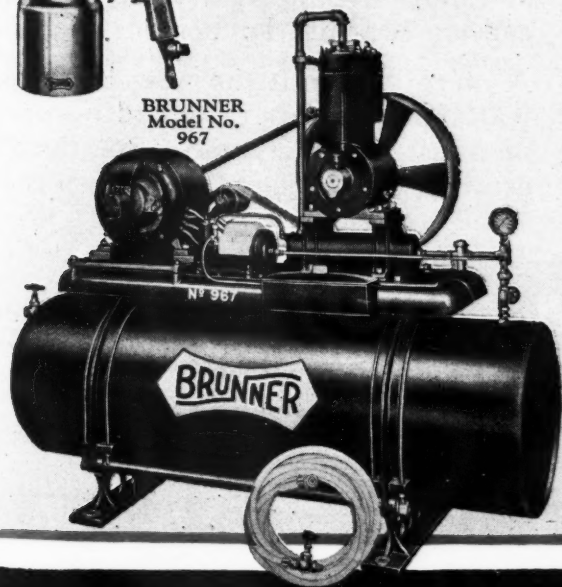


## SPRAY PAINTING



**BRUNNER Model 300 Spray Gun**  
Atomizes perfectly, light in weight, easily cleaned, perfectly balanced, quickly adjusted, the best gun made by far.

**BRUNNER  
Model No.  
967**



**T**HOUSANDS of dealers are spray painting their used cars and moving them quickly at a profit.

The type of equipment you buy, plays a big part in the results you'll get. Brunner equipment is generally conceded first place in the list, because it's a product of twenty-one years' experience in the manufacture of air-operated garage-tools and because it's a proven profit unit wherever installed.

Learn more about the Brunner line. Send for our booklet, "Spray Painting the Automobile." Write your name in the margin of this page. Tear it out and send it to us. You'll get your booklet by return mail.

**BRUNNER MANUFACTURING CO.**  
Utica, N. Y.

Kansas City, Mo. San Francisco, Cal. Toronto, Canada

# BRUNNER SPRAY PAINT EQUIPMENT

Write your name and address in the margin of this advertisement

# Peerless Sets the

## *Hundreds of dealers take on the Peerless franchise*

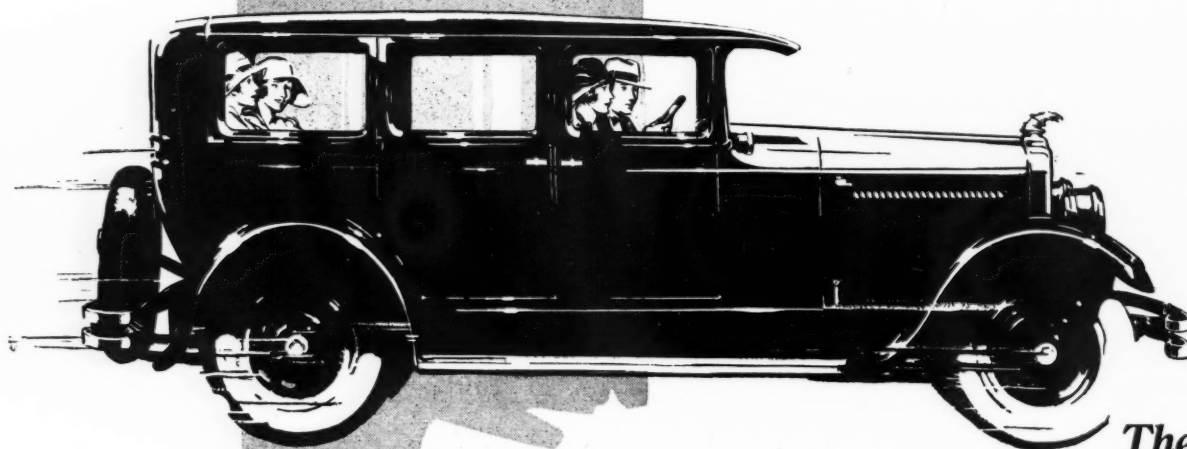


THE announcement of the new 1928 Sixes—all with 7-bearing crankshaft, Nelson Bohnalite Pistons, Ross Cam and Lever Steering, Hydraulic 4-wheel brakes, and a long list of other advantages—has sent the demand for Peerless soaring to new heights.

Never before has Peerless had so wide a lead on the industry in car value. Never before has Peerless quality been quite so obvious by contrast.

Sales are tremendous. Dealer interest is greater than ever before in the long history of Peerless success. Every week finds more and more live, up-and-doing distributors eagerly seeking the Peerless franchise.

A mere glance at the new 1928 models will show any experienced automobile man just why the demand for Peerless is growing so persistently—and so rapidly.



The 1928  
Six-60 Sedan  
\$1345

PEERLESS • HAS • ALWAYS



# e Pace for 1928

e  
e  
*There's still some territory  
available to live dealers*

Peerless prices today are the lowest they have ever been.

Think of a Peerless—known for years as a high-priced, quality car—selling for as little as \$1295.

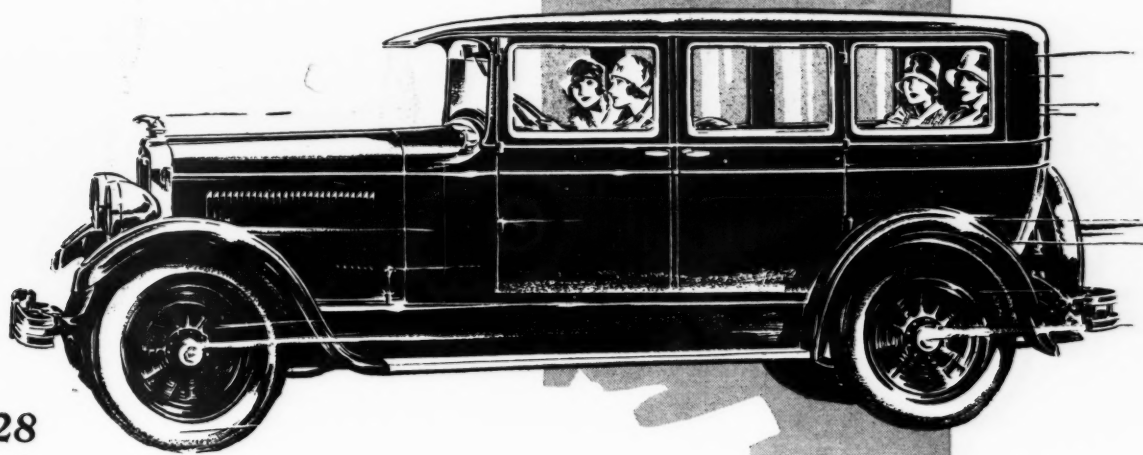
You can see—with prices so low—how the Peerless market has broadened—how it offers a highly profitable selling proposition for hundreds of dealers who could not exist on high-priced cars alone.

Write, wire or phone for details of the Peerless franchise. Know what Peerless is doing—what opportunities are offered by the Peerless set-up, as it stands today. Act now. The chance is too good to lose.

PEERLESS MOTOR CAR CORP.

Cleveland, Ohio

Manufacturers of the famous 90° V-type Eight-69, the Six-80, the Six-90 and the Six-60 (All prices f. o. b. factory)



28  
edan  
5  
The 1928  
Six-80 Sedan  
\$1595

B E E N • A • G O O D • C A R

# SHERWIN- PAINTS VARNISHES

*If you want—*

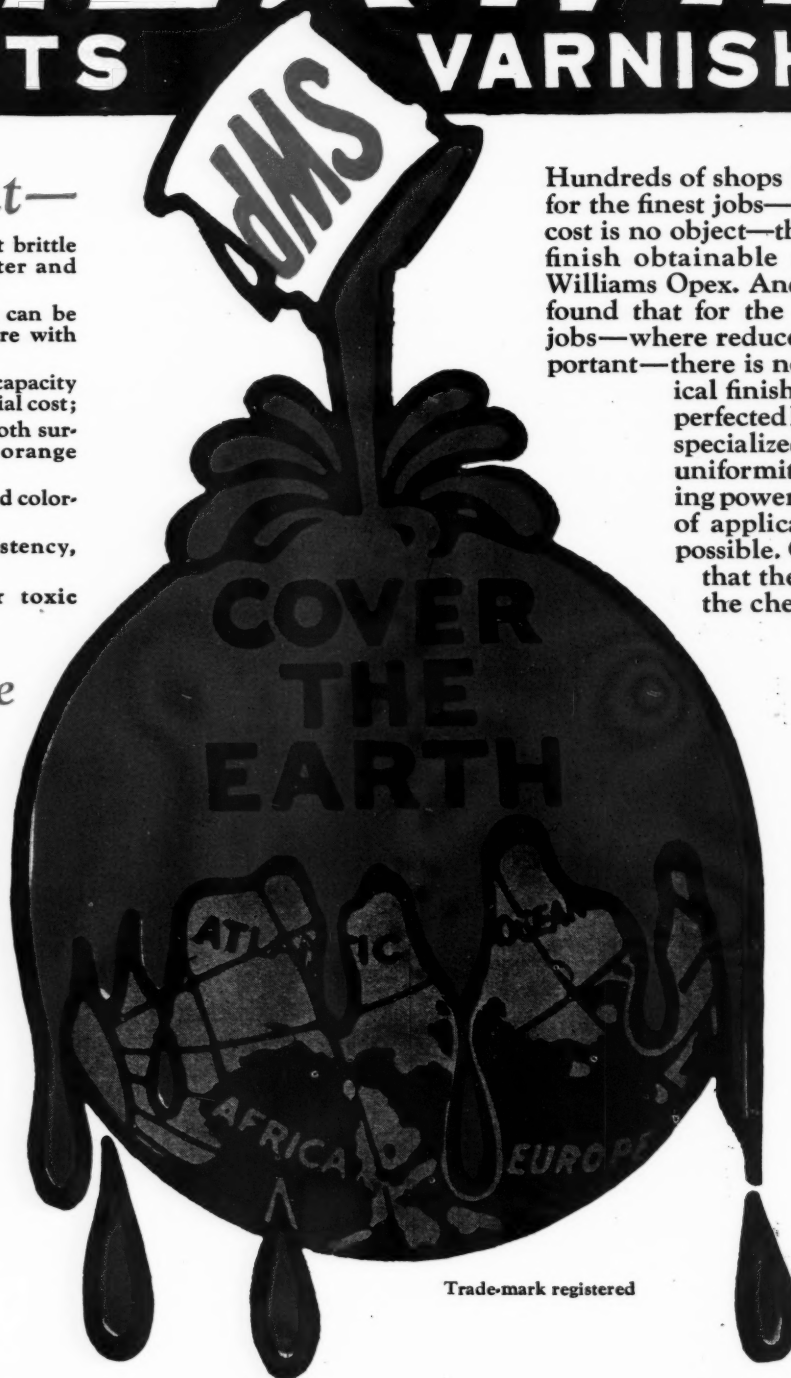
- 1 A hard, tough, but not brittle film that is wear, water and weather proof;
- 2 A natural gloss which can be brought to a high lustre with the lowest labor cost;
- 3 Exceptional covering capacity with a minimum material cost;
- 4 An even flow and smooth surface free of bubbles, orange peel or blushing;
- 5 Fast lacquer enamels and colorless clears;
- 6 Uniformity of consistency, weight and shade;
- 7 No residual odor or toxic fumes;

*You will use*

**OPEX**

*The perfected  
lacquer enamel*

Hundreds of shops have found that for the finest jobs—where finishing cost is no object—there is no better finish obtainable than Sherwin-Williams Opex. And they have also found that for the quickest dealer jobs—where reduced cost is all-important—there is no more economical finish than this same perfected lacquer. A highly specialized line, absolute uniformity, greater covering power and greater ease of application make this possible. Opex has proved that the best lacquer is the cheapest.



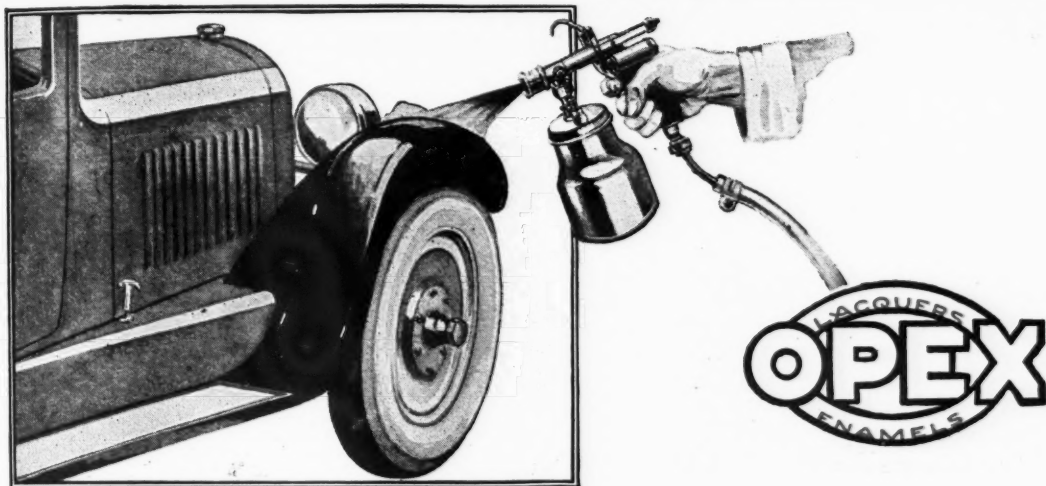
Trade-mark registered

# LARGEST IN



# WILLIAMS

## LACQUERS · ENAMELS



Now a full gloss black lacquer  
without hand polishing—an exclusive OPEX product

For fenders and running gear, this unique Opex Hi-Gloss Black is almost indispensable. It is unquestionably the only full gloss finish that can be actually classed as real lacquer—for the gloss is obtained through a special process of manufacture and not by adding gums which would merely convert it into a "mongrel" product.

As a result, Opex High-Gloss Black retains the durability and toughness that has made all Opex Lacquers famous and offers a

quick drying, high gloss lacquer without the expense of polishing.

More and more Opex is proving an unequaled profit-maker for the finishing department. Its absolute uniformity and remarkable covering power coupled with even flow and smooth, rich finish, have won the favor of both finisher and car owner.

Let us send you a detailed description of the many added refinements that have made Opex the peer of lacquer finishes.

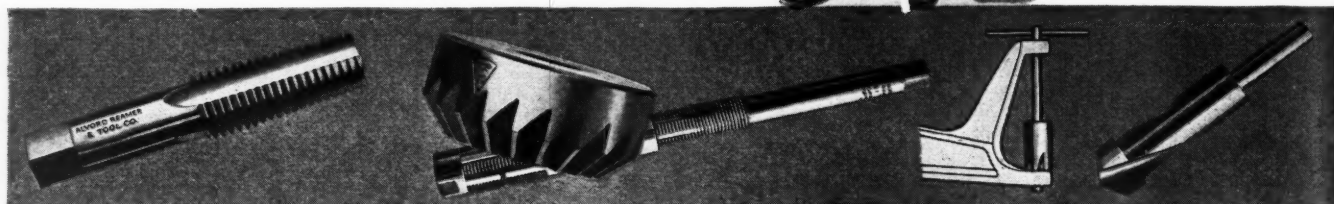
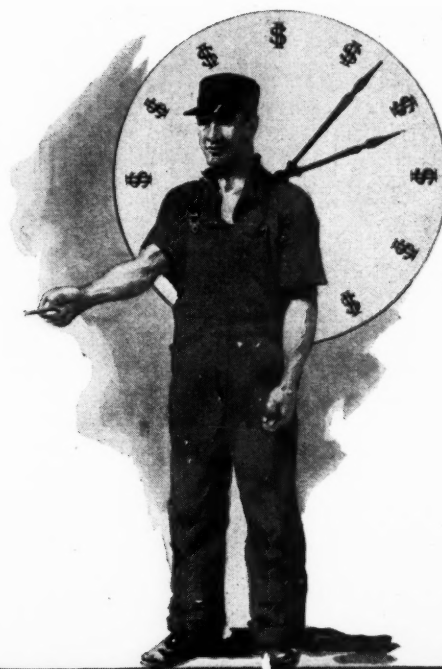
**THE SHERWIN-WILLIAMS Co.**

CLEVELAND, OHIO

THE SHERWIN-WILLIAMS CO.  
420 Canal Road, Cleveland, Ohio  
Gentlemen: Please mail me complete Opex data.  
Name and Title \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

THE WORLD

Time wasted  
waiting for  
a Hand Tool  
is  
**MONEY** lost



**N**O mechanic ever made any money for himself or for his employer waiting for his turn to use a Hand Tool. The truth of this is more and more apparent with the wide growth of the Flat Rate System—and it is safe to say that the day will soon be here when *every* mechanic will have a complete outfit of Hand Tools.

How are conditions in your shop? Are Hand Tools helping you to turn time into money—or is time being wasted waiting—waiting—waiting?

No matter whether you are a mechanic or the employer—your earning power is exactly in proportion to the amount of work done. A few minutes lost out of every hour soon counts up into lost dollars.

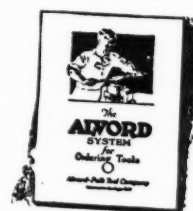
A full kit of Alvord-Polk Tools could be paid for with the money now being lost waiting for tools someone else is using. Alvord-Polk Tools

are priced as low as first class quality permits. They are on sale and on display at leading Jobbers' salesrooms.

Check up today on your Hand Tool equipment—then visit your Alvord-Polk Jobber and buy the tools that turn time into money.

**FREE!**

You ought to have the  
Alvord-Polk Catalog.  
Write for it—it's free.



ALVORD-POLK TOOL COMPANY  
MILLERSBURG, PA.

**ALVORD - POLK**  
*Tools for Repair Shops*





*Their lives hang  
by a thread!*

But . . .  
if that thread is  
asbestos — spun  
and woven into  
Johns - Manville  
Asbestos Brake  
Lining, then they  
know they're safe.

JOHNS-MANVILLE CORPORATION  
291 MADISON AVE., NEW YORK  
BRANCHES IN ALL LARGE CITIES  
FOR CANADA: CANADIAN JOHNS-  
MANVILLE CO., LTD., TORONTO





To almost every motorist the name Johns-Manville means good asbestos. Fifteen million people every month are seeing that name in the pages of their magazines.

# 50 years experience in back of every thread

Every asbestos thread that's woven into Johns-Manville Asbestos Brake Lining has a 50 year reputation to uphold. Before the birth of the motor car Johns-Manville was lining the brakes of huge industrial machinery. This same asbestos woven into a tough lasting fabric brings safety and durability to the brakes of motor cars today.

Johns-Manville *has* to be a better brake lining. Your reputation depends on it, and so does ours.



Your name goes on this sign. Get it from your distributor.

over



# HERE'S *a real line* of Radiators

## 9 points of superiority

- 1 Proof against damage from boiling.
- 2 Proof against damage from freezing—even freezing solid.
- 3 Old-fashioned dummies of ordinary cores practically eliminated.
- 4 Freer circulation makes for greater cooling ability.
- 5 Wider distribution of the water raises boiling point.
- 6 After freezing, when thawed out again, all parts resume normal position.
- 7 Built to last 10 years or more.
- 8 Tested to 20 pounds air pressure, 5 times more than ordinary.
- 9 Built to stand road shock.

The automobile radiator has become such a commonplace piece of merchandise that it might almost be called a commodity.

As a commodity, it has all but lost its individuality from a specialty, accessory or improved parts standpoint.

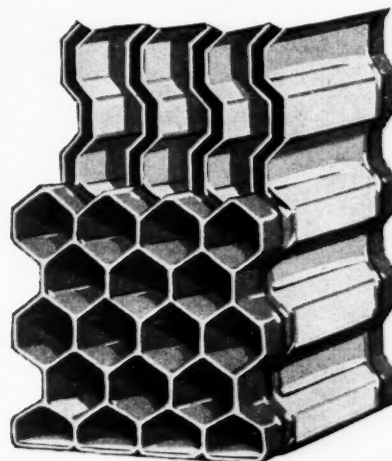
Take the product of any one of half a dozen good radiator manufacturers and it looks and performs very much like its fellows.

Reasonably satisfactory performance of the ordinary radiator has brought about a "let well enough alone" state of mind.

And there lies the great opportunity for live dealers and repairmen to offer STANDITALL Radiators as "the better radiator."

STANDITALL Radiators offer the greatest advance in radiator design and practice in a decade.

Write for details—giving us the name of your jobber.



*Section of core with portion of separators cut away to reveal spacious waterways. Note the unobstructed air-contact surface and the narrow separators.*

J. C. Black Mfg. Co., Inc.  
Factory and Executive Offices  
Oil City, Pa.

Export Department, 116 Broad St., New York City

# STANDITALL AUTO RADIATOR



**NO MORE BURNED OUT BEARINGS**  
**NO MORE SCORED CYLINDERS**  
**NO BIG REPAIR BILLS**  
**NO RUINED ENGINE**

**Biflex Safety Devices**

*Biflex Bumpers*  
*Halladay Bumpers*  
*Dyneto Windshield Wipers*  
*Oilostat*



Patented July 29, 1913, May 11, 1920.  
Other Patents Pending



# OILOSTAT



*Watch Dog of the Motor*

**A New Biflex Product**  
now being sold through automobile  
service stations - large and small -  
the fastest selling accessory in 10  
years - *a whirlwind success!*

A brand new one!

The result of 7 years' study and research by its inventors.

Backed by Biflex!

Tested on practically every make of car for over a year before it was introduced.

Already an outstanding success. Sold first in Chicago through Studebaker, Nash, Chrysler, Willys-Overland, Auburn and other distributors and dealers. Proclaimed the fastest selling new accessory in years.

A 20,000,000 car market is ready for Oilostat.

Here is what it does; when the oil pressure of a motor fails from any cause—lack of oil, leaky or broken pipe, loose connections, worn out pump, too much sediment in the crankcase—this marvelous device shuts off the flow of gasoline . . . stops the motor before any damage can be done to its delicate mechanism.

In other words, with no oil in the motor a driver cannot possibly *burn out bearings* with Oilostat installed on his car. You know that next to bad collisions *burned out bearings cause more damage to cars than anything else*. Repair bills run from \$75 to \$350. A burned out bearing means a ruined

car. Oilostat positively stops the loss of thousands upon thousands of dollars every day caused by lack of oil.

Oilostat does not merely warn—it acts promptly. The motor can be started at once if the oil is replenished or by turning a red valve, gasoline flows to the carburetor and the motorist can proceed slowly to the nearest gas station for oil.

*Oilostat protects new motors.* It automatically mixes oil with gasoline to lubricate pistons, valves and valve guides, eliminating sticky valves. Nothing like it for breaking in a new motor.

*Oilostat also strains gasoline.* All gasoline flows over a mushroom partition which traps all impurities by a new and unequalled method. It prevents the carburetor from flooding.

It is the only device on the market which absolutely protects motorists from *burning out bearings* due to running the motor without oil.

The Oilostat can be installed for \$10. It is something that every motorist needs and wants. It is a Big Profit Maker for dealers. Write for complete information. Handled by all Biflex distributors.

**BIFLEX CORPORATION**  
WAUKEGAN, ILLINOIS

# Millions to be made on AC PRODUCTS AC Spark Plugs

Over 12,000 cars a day equipped at the factory with AC Spark Plugs, among them being:

Chevrolet . . . . .	Always AC-equipped
Buick . . . . .	AC-equipped for nineteen years
Oakland . . . . .	AC-equipped since 1908
Pontiac . . . . .	AC-equipped since the first one made
Oldsmobile . . . . .	For seventeen years AC-equipped
Cadillac . . . . .	AC-equipped since 1902
Hudson . . . . .	AC-equipped for thirteen years
Essex . . . . .	Always AC-equipped
Chrysler . . . . .	AC-equipped since the first one made
Nash . . . . .	Always AC-equipped
Star . . . . .	Always AC-equipped
La Salle . . . . .	AC-equipped since announced

These well known makes, plus 125 other makes of cars, trucks, tractors, motorcycles and engines make the daily total of AC-equipped engines well over 12,000.

This tremendous equipment means positive and ever-increasing sales for dealers.

## AC Oil Filters

There are now more than a million cars in use and over 10,000 a day are leaving the factories—all AC Oil Filter equipped.

Following are the cars and trucks using AC Oil Filters as equipment:

### Passenger Cars

Buick	Nash
Cadillac	Oakland
Chandler	Oldsmobile
Chevrolet	Paige
Dodge	Peerless
La Salle	Yellow Cab

### Commercial Cars

Available	Nelson-Le Moon
Federal	Maccar
GMC	Ward-La France

The filtering unit on every one of these AC Oil Filter equipped cars becomes filled with dirt after a certain mileage and must be renewed, to insure efficient lubrication.

In addition to this, there is the business of complete oil filter installations for cars not equipped with an oil filter.

### How You Can Get This Oil Filter Business

Make it a point to test the oil filter on every oil filter equipped car.

Write a letter to owners of oil filter equipped cars in your community, advising them that their oil filter cartridges should be renewed at least every 10,000 miles.

Get over to owners that an oil filter is economy because it keeps the oil clean—thus reducing engine wear—and there is not the expense of changing oil every 500 miles.

## A. C. Spark Plug Company, FLINT, Michigan

AC SPHINX  
Birmingham  
ENGLAND

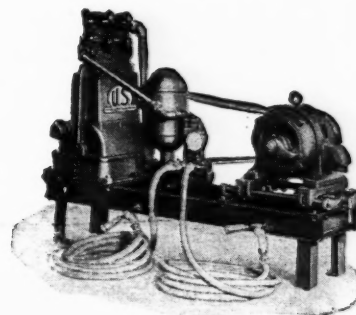
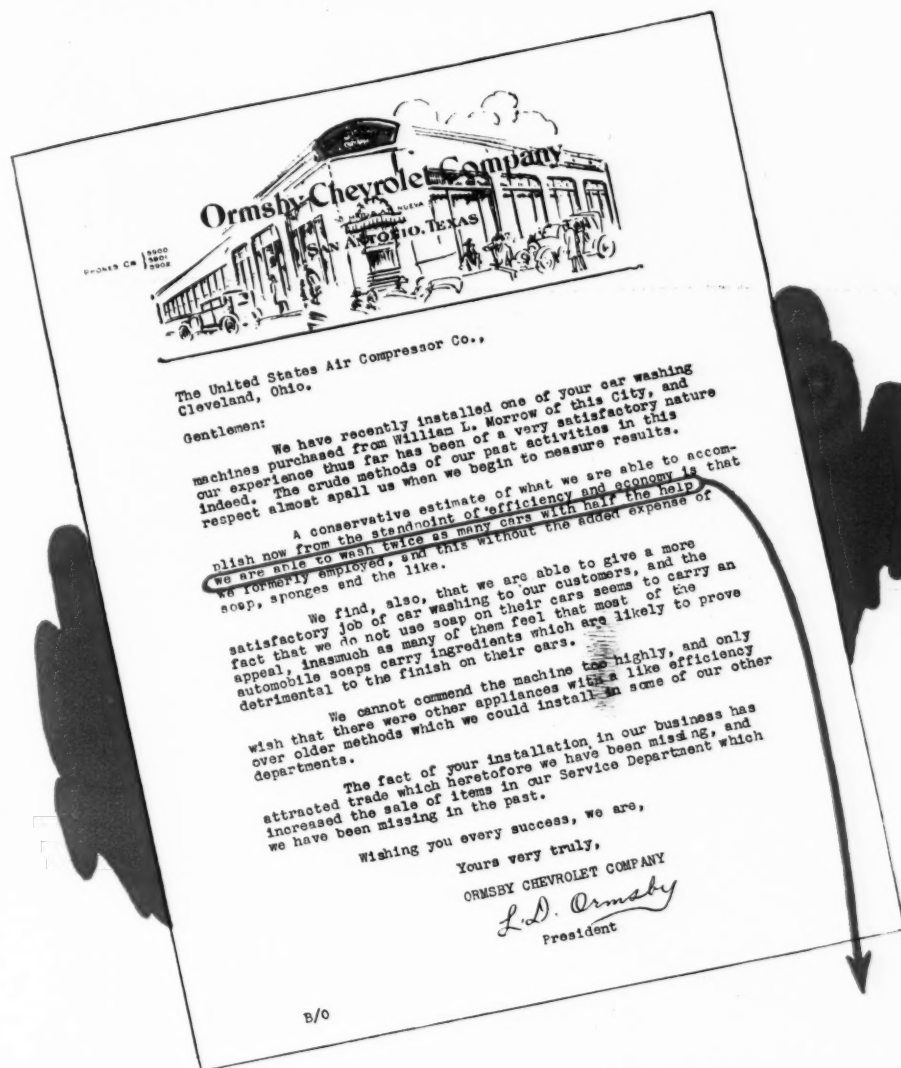
Makers of AC Spark Plugs—AC Speedometers  
AC Air Cleaners—AC Oil Filters  
AC Gasoline Strainers

AC-TITAN  
Clichy (Seine)  
FRANCE

Over 200 of the world's most successful manufacturers use one or more, or all of these AC Products

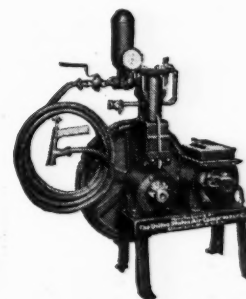
AC SPARK PLUGS AC SPEEDOMETERS AC AIR CLEANERS AC OIL FILTERS  
AC FUEL PUMPS AC GASOLINE STRAINERS AC AMMETERS AC OIL GAUGES AC THERMO GAUGES





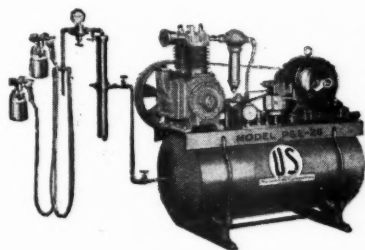
AW-2 Car Washer

This two-gun car washer, like all U.S. Hydraulic Car Washers, has the exclusive patented U. S. vacuum breaker valve which permits direct connection to city water lines without danger of the 325 pounds pressure causing damage to plumbing fixtures.



AW-Junior Car Washer

The AW-Junior Car Washer is the only one-gun high pressure unit of the totally enclosed, self-oiling type. It is made especially to help the smaller operator solve his car washing problem.



Model PSE-26

Model PSE-26, shown above is one of the combination paint spray equipments which U. S. has developed for car dealers and garages to solve their used car problem. It supplies sufficient air for continuous operation of two paint guns or for one gun and ample high pressure air for tire inflation, spraying springs, cleaning motors and other shop operations.

## U. S. CAR WASHER

### Doubles Capacity, Lowers Costs

Another example of how U. S. Equipment increases the efficiency of a car dealer's service department and reduces costs, is shown in the letter from the Ormsby Chevrolet Co., of San Antonio, reproduced above.

In this instance, a U. S. totally enclosed, self-oiling car washer cleaned twice as many cars with fewer employees as could be handled by the hand method, besides increasing business in the service department.

U. S. Paint Spray Units and U. S. Air Compressors are also raising the efficiency and increasing the profits for car dealers and garages everywhere.

### The United States Air Compressor Company

Manufacturers of Air Compressors, Paint Spray Units and Car Washing Systems

5304 Harvard Avenue

Cleveland, Ohio

Western Office: 927 Santa Fe Ave., Los Angeles, Calif. Cable Address: Airpressor—All Codes

Please Check

**AIR COMPRESSORS** ☐  
**PAINT SPRAY** ☐  
**CAR WASH EQUIPMENT** ☐

**U.S.**

The United States Air Compressor Company  
Cleveland, Ohio - U. S. A.

Print Name

NAME

ADDRESS

CITY



The New  
 "SUPERRENCH" FINISH  
 Makes 'em Easier'n Ever to Buy

Royal blue Williams' Wrench Boards display the new Chromium Finish to the greatest selling advantage. Board MJ (left, above) shows "Superrenches" for all popular U. S. and S. A. E. Std. nuts and cap screws,  $\frac{1}{8}$ " to  $\frac{9}{16}$ ". Board 1083 (right, above) carries a picked assortment of Tappet "Superrenches" caring for all prominent cars. Both these sales accelerators are free to purchasers of the wrenches they display.

**WILLIAMS**  
 SUPERIOR DROP-FORGED TOOLS



Every "Superrench" is  
 guaranteed against breakage.

MAKE sales opportunity of the new "Superrench"—with its beautiful new finish. Hang your "Superrench" Boards in full view, and keep a "Superrench" display card on your counter. Give your customers a chance to look at the smoothness and the enduring beauty of the *rust-proof chromium-plated finish*. In their new dress, "Superrenches" make an instant selling impression—which means many a quick sale.

Chrome-Molybdenum "Superrenches," with their amazing strength, their thin heads and narrow, pointed jaws, have always been tough, handy tools. Now, their beauty is increased—and is lasting. See that your customers see them—you'll see that they sell themselves.

**J. H. WILLIAMS & CO.**

"The Wrench People"

New York

BUFFALO

Chicago



# Are YOU Ready?

One section of the country has already given  
unqualified endorsement of

## Lepel

TRADE MARK  
HIGH FREQUENCY  
CONVERTERS



—and we are backing up Jobbers  
and Dealers in that area with a  
*real* advertising campaign

This is only our first step preparatory to moving through the greater part of the United States with intensive advertising campaigns to secure wide distribution, and to build volume sales from steadily repeating business.

*Get going in YOUR area!*

### LEPEL IGNITION CORPORATION

117 WEST 63rd STREET

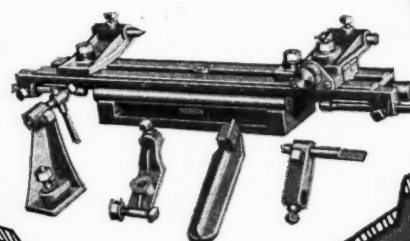
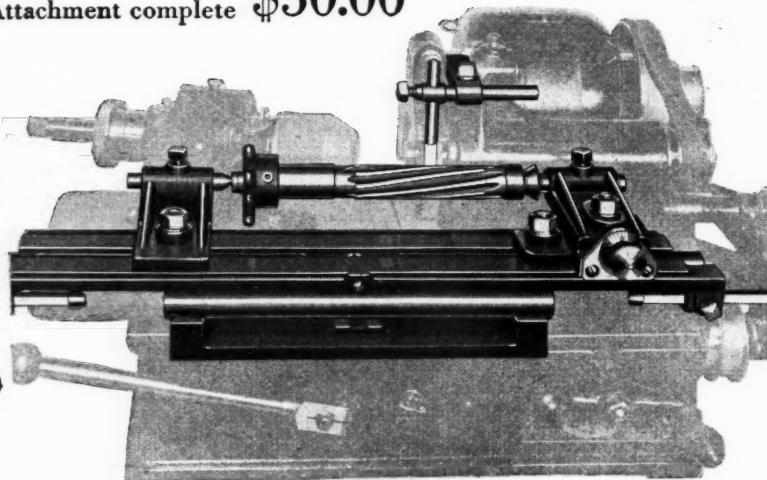
NEW YORK CITY

# EXPANSION REAMER GRINDING ATTACHMENT

FOR  
SIOUX VALVE FACE  
GRINDING MACHINE

Net Price of  
Attachment complete \$50.00

No. 680



**A** GAIN Sioux leads in bringing out money-saving, profit increasing tools for motor repair shops. If you use expansion reamers — either straight or spiral — this new Sioux attachment will save you money. It keeps your reamers in top notch cutting condition and makes it unnecessary to buy a whole new set of blades when one breaks. So simple and practical that any mechanic can get perfect results with it. No guesswork. Used only with the Sioux Valve Face Grinding Machine.

**Your Jobber Sells It.**

ALBERTSON & CO.  
SIOUX CITY IOWA, U.S.A.





## Mohawk's famous Interchangeable Drawer Unit— *now either battery or electrically operated—* fits every Mohawk Console

The radio world was amazed when Mohawk first introduced the One Dial Radio set—and housed it in an interchangeable drawer unit to fit *all* consoles in the Mohawk line—giving a price range from \$67.50 to \$385.

It was further amazed when, in keeping with the mounting popularity of light socket operation, Mohawk announced an AC electrically operated Drawer Unit—also interchangeable, of precisely the same dimensions, to fit every Mohawk console.

Entirely aside from the unrivalled *quality* of the Mohawk One Dial Radio set, this interchangeable feature is a *merchandising* achievement that makes the Mohawk Dealer's position the *strongest and soundest* in the industry.

Still Mohawk has not been satisfied, but has continued piling one sales advantage

upon another, to make the Mohawk Dealer Franchise the *one* outstanding dealer proposition—finally adding the immeasurable advantage of becoming a licensee under RCA, General Electric and Westinghouse patents.

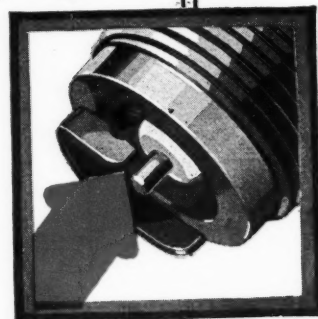
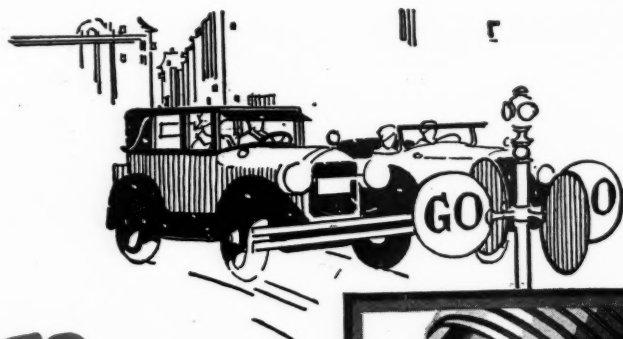
Your opportunity for a "Close-up" of the Mohawk proposition occurs October 10th to 16th at the Coliseum—Sixth Annual Chicago Radio Show—be there! Or wire for details of the Mohawk Dealer Franchise.

MOHAWK CORPORATION OF ILLINOIS  
Established 1920 • Independently organized 1924 • CHICAGO

**Mohawk**  
**One Dial Radio**

Manufactured under Mohawk patents and RCA License

# Every ignition expert knows



This small .015" spark gap means a hot, intensive spark for quick, easy starting.

**S**TARTING a car is easier when the spark gap is set small; bound to be so, for most of the battery output is being used to turn over the engine—very little finds its way thru the ignition coil to the spark plugs.

Yet, obviously, a spark gap set to meet the demands of easy starting is shy of running power—the same gap cannot possibly be right for two such dissimilar conditions as starting and running: a gap that is set and fixed must of necessity be a compromise, satisfying neither condition.

Moto Meter Spark Plugs, because of the self-adjusting gap, meet the demands of quick starting and smooth running with a gap for each condition—a proper gap that means the utmost in engine efficiency and improved motor performance. Every set of Moto Meter self-adjusting Spark Plugs you sell carries with it the assurance of complete motor satisfaction that earns dividends for you in consumer good-will.

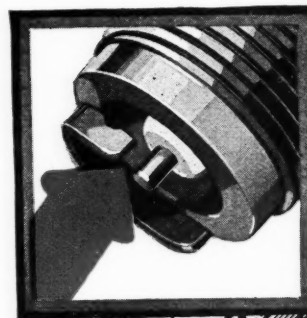
List: for Fords, 75c. Other Cars, 90c. Trucks and Tractors, \$1.00 (Heavy Duty)

THE MOTO METER COMPANY, Inc., Long Island City, N. Y.

THE MOTO METER CO. OF CANADA, Ltd., Hamilton, Ontario

*The name Moto Meter is the registered trade mark and exclusive property of this company.*

This wide .030" spark gap gives a fat, strong spark for smooth running, quick pick-up—more pep.



**MOTO METER**  
TRADE MARK REG. U.S. PAT. OFFICE  
SELF-ADJUSTING  
**SPARK PLUG**

IF IT'S A MOTO METER PRODUCT IT'S THE LEADER IN ITS LINE



# 10 million cars need JUMBO TOW CABLE



*"The Steel Line with the  
Red Hooks"*

Jumbo has knocked the tow line market clean off its feet. Patented non-slip malleable-iron hooks. 15 feet of  $\frac{3}{8}$  inch steel cable. Tremendous strength in smallest bulk and weight. Stows in neat coil, self-fastened.

**Guaranteed to Pull 5 TONS**

Jumbo Tow Cable is selling to thousands of motorists never interested before. Double line at both ends for fastening, with rubber chafing guards. Packed in 3-color display boxes. Order through your jobber. Lists \$3.50

## Jumbo ThorOtest for Spark Plugs

*(Tests Spark Plugs Under Compression)*

First and only device of its kind—and needed. Shows actual firing of plugs under variable compression. Shows up the plug that fires on top of the block but cuts out in the motor. Picks out the faulty new plugs—the shorted plugs—the ones with invisible cracks.

Absolutely safe. Operator watches—through heavy plate glass—the reflection of the firing plug. A complete unit—just connect to air line and plug into light socket. Has been on the market for years.

*The Price is low  
Write for details*

*Free Display Shows  
Tow Line in Use*

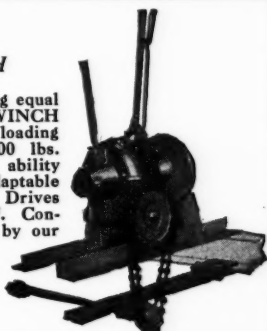
Free with first order for 6 Tow Cables (one carton), this big smashing lithograph shows actual tow cable attached to front of car.



### The NEW JUMBO WINCH

Priced clear under any winch approaching equal utility, the new JUMBO DRUM WINCH causes no material loss of truck-body loading space, and has a capacity up to 5000 lbs. Hoisting—setting—pulling—moving—its ability more than trebles a truck's utility. Is adaptable to any type and any size of truck. Drives direct from transmission power take-off. Construction and dependability are backed by our guarantee. Send coupon for complete details.

*Order through your jobber*



ORDER  
THROUGH  
YOUR  
JOBBER



THE PRICE-HOLLISTER CO.  
ROCKFORD, ILLINOIS  
Dept. P-10

# JUMBO

 EQUIPMENT

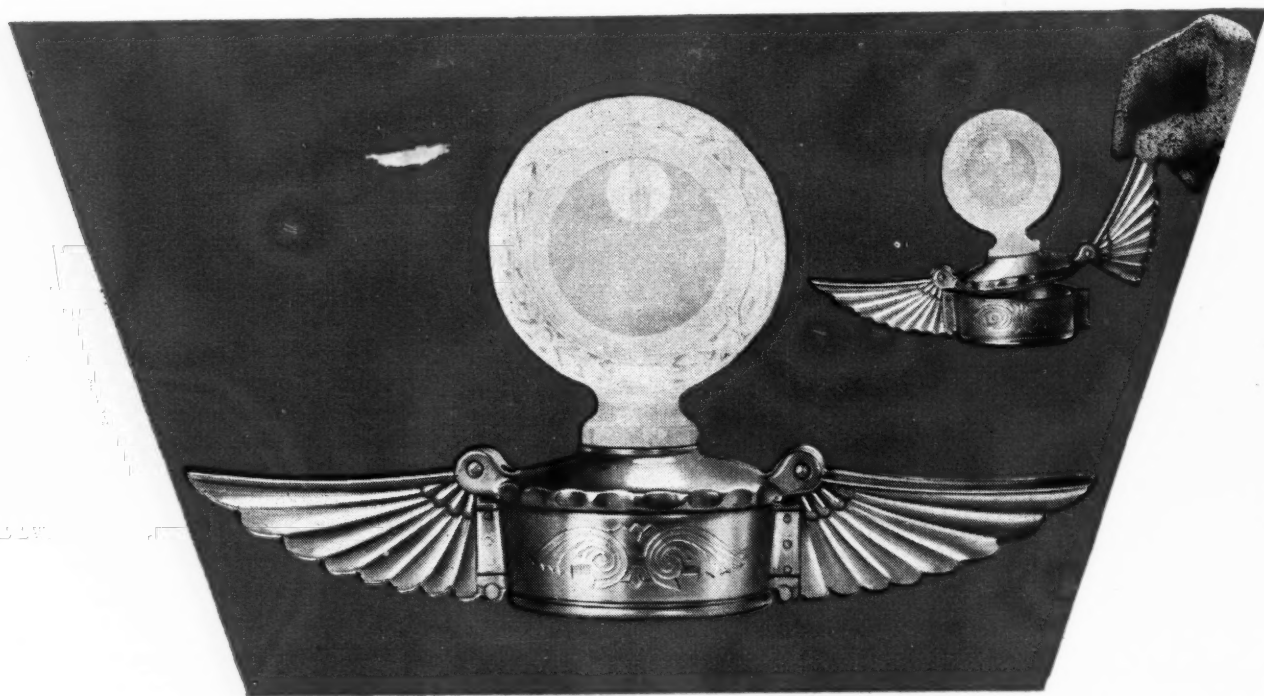
THE PRICE-HOLLISTER CO.  
Rockford, Ill.  
Dept. P-10

Send complete details concerning:  
☐ Jumbo Thorotest. ☐ Jumbo Tow Cable.  
☐ Jumbo Winch.

Name.....

Address.....

# BETHLEHEM *TILT-WING* RADIATOR CAPS



## *Decorative, quick-filling, durable*

THE Tilt-Wing radiator cap is a handsome accessory that sells quickly and carries a good profit. The distinctive appearance of this model and its convenient quick-filling feature distinguish it from ordinary caps and create an immediate preference for it.

Raise one wing and the cap tilts to one side in an instant, exposing radiator filler completely. Cap cannot block the hood, which may be lifted freely whether cap is open or closed.

Body and wings of the Tilt-Wing are made of forged bronze, with a beautiful polished nickel finish. An aluminum sleeve in the body casting makes the cap absolutely water-tight and steam-proof. Both cap and motor meter can be locked in position to prevent theft.

Bethlehem Tilt-Wing Radiator Caps are made in two sizes. List, large \$5.50; medium \$4.50.

Other Bethlehem caps are the DeLuxe cross-bar model and, for small cars, the low-priced Utility and Snappy Cap models—all with convenient quick-filling construction. Splitdorf-Bethlehem products are sold through regular jobbing channels. Splitdorf Electrical Company, 392 High Street, Newark, N. J. *Subsidiary of Splitdorf-Bethlehem Electrical Company.*



Reg. U. S.  
Pat. Off.

Established  
1858



# The most amazing Casing Repair ever produced!

No Equipment  
No Labor

Certain Service  
Tremendous Profits



**TIRE  
PLASTER**

## Giant Size

THE *Giant Size* is the last word in the *Va-Car Method* of Tire Repair, recognized, used and accepted by dealers and motorists everywhere.

You won't have to turn down the bigger repair jobs any longer. This *Giant Size* instantly and *permanently* repairs the biggest breaks and blowouts. It relieves expensive vulcanizing machinery to the junk heap. Certain service. *Va-Car* does the work. You take the profits.

### Repairs Every Break and Blowout!

The size makes no difference. If the casing is at all repairable, the *Va-Car Giant Size* will *permanently* repair it. The *Giant Size* fits a 3½-inch casing from bead to bead. It works perfectly in all sized casings, all the way up to 8-inch high-pressures, and in any size balloons.

### You're Fixed With the Giant!

Chances are you are already using the Small, Medium and Large sizes of *Va-Car*. These take care of most jobs. But with the *Giant Size* you take care of every job. You will never again lose tire repair sales—the jobs will stay right with you, where they belong!

### Become a Tire Repair Specialist

without investment in expensive equipment. *Va-Car* has made this possible. Big profits await you, too.

**Order the Va-Car Giant Size From Your Jobber Today!**

VIRGINIA-CAROLINA RUBBER CO., INC., RICHMOND, VA.

# ESSEX COACH

*Equipped with* **HEXDEES**

## Breaks Mt. Baldy Record!



## Another Great Victory for Hexdees!

Darting up grades almost as steep as the sides of a building, whizzing around vicious turns, onward and upward, faster and faster, George Danielson, driving a new Essex Super-Six Coach equipped with Hexdees, reached the top of Mt. Baldy, near Los Angeles, in  $12\frac{3}{4}$  minutes—smashing all previous records by  $46\frac{1}{2}$  seconds.

After six other makes of shock absorbers failed in the trial tests, Hexdees were installed. Mr. Danielson, general superintendent of the Walter M. Murphy Motors Co., Hudson-Essex distributors, Los Angeles, attributes his ability to hold his car on the road to Hexdees; they kept the wheels on the ground, prevented slipping and stopped galloping.

In the supreme test, as in everyday service, Hexdees are always dependable. In efficiency they equal the best of shock absorbers, yet they cost two-thirds less.

Hexdees are making volume profits for dealers everywhere. Write today for the attractive Hexdees proposition.

**DETROIT STEEL PRODUCTS COMPANY**  
2286 East Grand Boulevard, Detroit, Mich.

*Pacific Coast Factory: Oakland, California*

*Canadian Factory: The B. J. Coghlin Co. Ltd., 2050 Ontario St., E. Montreal*

The NEW TYPE LOW COST Shock Absorber

# HEXDEES

Designed for Spring Control by the Manufacturers of "Detroit Springs," which are Standard Equipment on over 40 Leading Cars and Trucks

46.5 seconds.  
Although permitted to remove fenders, Danielson elected to drive the car with full standard equipment adding a set of Hexdees, as snubbers are an absolute necessity on the corduroy road at the speed it was necessary to maintain to break the record.

Clipping from Los Angeles Examiner,  
Aug. 14, 1927

**\$14<sup>25</sup>**  
for complete set

**\$8<sup>75</sup>**

complete set for Fords

\$15.25 and \$9.25, respectively  
Denver and West.





## “Just Open and Serve”—

**Arrow Head**



**Dependable  
Products**

Save 20 machining,  
inspecting and fitting  
operations when you  
build a Motor—use Ar-  
row Head Balanced Pis-  
ton-and-Pin assemblies  
—just unwrap and slip  
into place.

**SIMPLIFY!** Replace some 27 engineering, purchasing, stock-keeping, inspection and production operations by standardizing on Arrow Head balanced piston-and-pin assemblies. Many of America's leading motor makers have simplified operation, cut costs and increased the car owner's long time satisfaction with his motor by specifying Arrow Heads *exclusively*.

**ARROW HEAD STEEL PRODUCTS COMPANY**

Buffalo

MINNEAPOLIS, MINNESOTA

Chicago

# Arrow Head

**Pistons   ♦   Piston Pins   ♦   Axle and Drive Shafts**

Atlanta

Boston

Cleveland

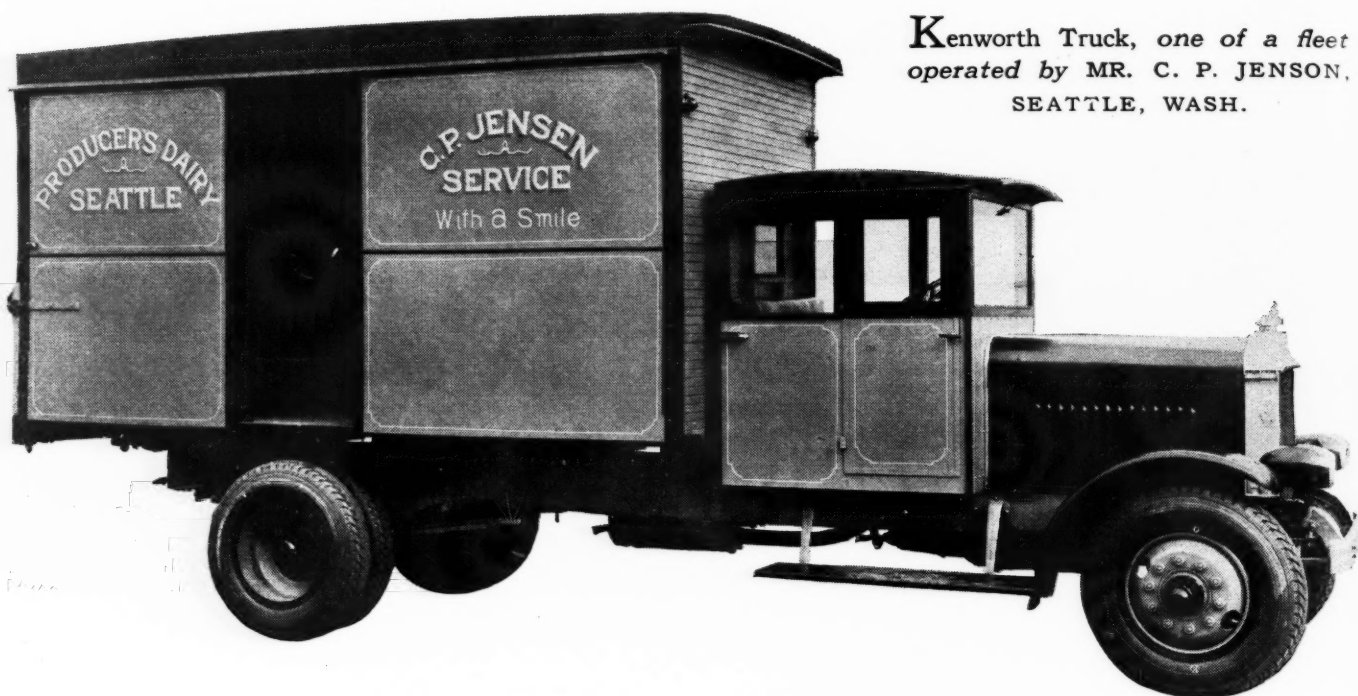
Dallas

Kansas City

Los Angeles

New York

San Francisco



Kenworth Truck, one of a fleet  
operated by MR. C. P. JENSEN,  
SEATTLE, WASH.

## The man who made it says . . .

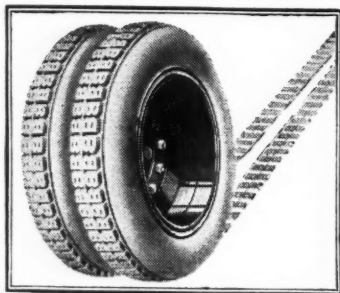
"We have standardized on Budd Duals for our 3-ton model. A little later on we hope to make Budd Duals standard on other models of our trucks."

Kenworth Motor Truck Corp.

## The man who bought it says . . .

"I would not buy a truck of any kind that could not be furnished with Budd Duals. To my way of thinking they are the neatest, safest dual wheel made—and the fastest wheel to remove in case of tire trouble."

POSITIVE PERMANENT ALIGNMENT



GREATER TIRE MILEAGE

YOU GET FROM 15,000 TO 20,000 MILES from a set of tires on Budd Duals—

Because Budd Duals *always* run true as an arrow—

They can't get out of alignment to wobble and shimmy—

They have no demountable rims, no rim clamps—

So you can't get a tire on crooked.

This positive, *permanent* alignment is made possible by a patented feature—only Budd Duals have it.

Seattle, Wash.

. . . and we've been saying all  
along that BUDD DUALS help  
sell the truck!

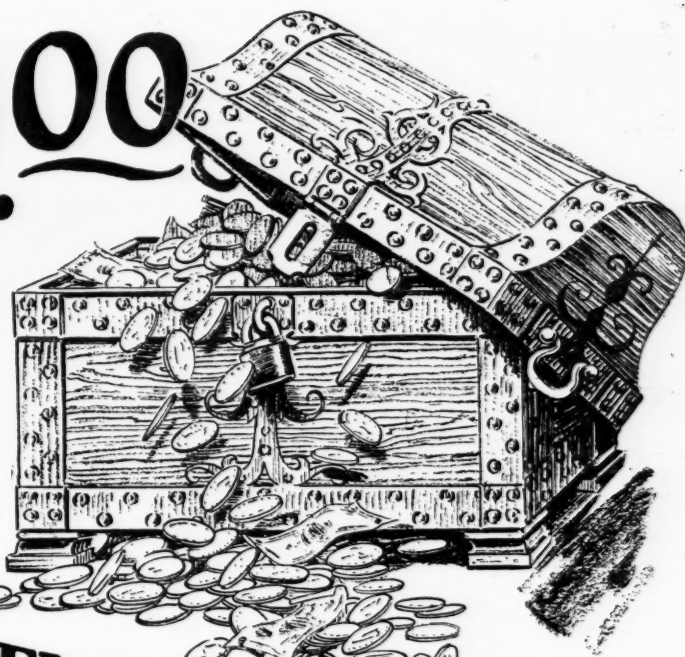
# BUDD Wheel Company, DETROIT, MICH.

# \$1000.00

## ANNUAL PROFIT

from a

# \$20.00 INVESTMENT



A **REMARKABLE** money making opportunity is presented by a well known pioneer manufacturer in the automotive field; a concern which has in the past twenty-five years established an enviable reputation for high quality products and desirable trade policies; a prominent member of the Automotive Equipment Association.

This company has proved to their complete satisfaction that live dealers will profit handsomely by this wonderful money making development. Complete details will be sent promptly upon receipt of the coupon properly filled out and attached to a copy of your letterhead.

*The estimate of one thousand dollars annual profit with twenty dollars invested, is based on a business that services an average of ten cars per day.*



Old line manufacturer  
Box 711

CHILTON CLASS JOURNAL CO.  
Chestnut & 56th Sts. • Philadelphia, Pa.

Gentlemen: Please send me at once complete details of your remarkable money making opportunity.

Name .....

Company .....

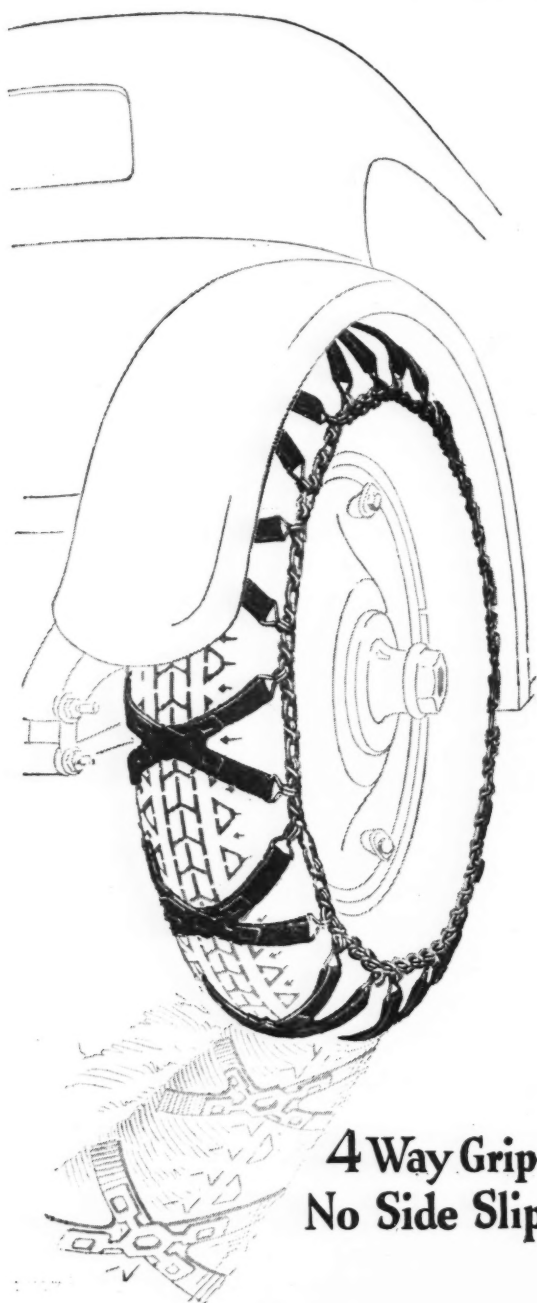
Address .....

Check type of business

- |   |  |
|---|--|
| <input type="checkbox"/> Jobber         | <input type="checkbox"/> Accessory Store               |
| <input type="checkbox"/> Car dealer     | <input type="checkbox"/> Electrical and battery dealer |
| <input type="checkbox"/> Service Garage | <input type="checkbox"/> Repair shop                   |



# Balloon Tires *require* Rubber Chains



**4 Way Grip  
No Side Slip**

IT'S the big difference in *flexibility* between the modern low-pressure tire and the old-fashioned hard pneumatic that is bringing rubber tire-chains to the front.

When tires were pumped up hard, the ordinary chain could give excellent non-skid protection because the hardness of the tire forced the chain to dig itself into the road.

It's quite different with the soft, low-pressure tires of today. The chain that presents only a hard and narrow edge to these soft tires gets forced *up into the tire* instead of *down into the road*. The result is loss of traction—and injury to the tire.

The rubber chain on the other hand, presents a *broad, flat, and smooth surface* to the tread of the tire—and because of this, the rubber cross-link does not push up into the tire. This means more ground-grip, greater non-skid value—and a big saving in tire wear.

Rubber Chains are:

1. **Economical.** They save the tire and they outwear ordinary chains.
2. **Silent.** No banging or clanking on fenders, no rattle on pavement.
3. **Safer.** Because the X-shaped cross-links grip the road in *four* directions. It's the only chain that gives protection against side-slipping.

**4 WAY  
GRIP  
GATES CHAINS**

**4 Way Grip—No Side Slip**

Manufactured By The Gates Rubber Company, Denver, U. S. A.

# Be a Leader with The Leaders!

Weidenhoff Shop Equipment Distributed by  
America's Leading Automotive Equipment Jobbers  
And Used by America's Leading Service Stations

You buy certain equipment because of your confidence in the manufacturer—but—mainly on account of the confidence you have in your jobber who makes a thorough RESEARCH of different lines and only offers you equipment that comes up to the highest standards of quality and service. Buy Weidenhoff Equipment with confidence and patronize our distributors who are leaders in the industry.

What one of America's Foremost Automotive Equipment Distributors has to say:

WETMORE-SAVAGE  
AUTOMOTIVE EQUIPMENT CO.  
588 COMMONWEALTH AVE.  
BOSTON  
September 16, 1927.

Joseph Weidenhoff Co.,  
4352 W. Roosevelt Rd.,  
Chicago, Ill.

Gentlemen:

We want to tell you how pleased we are with our appointment as a distributor of Weidenhoff products.

We consider we are part of your business family - members of your sales organization.

We made the selection after careful investigation by our own field men.

We laid great stress on the quality of the product and service rendered to the dealer after the sale has been completed, and we have assured ourselves that both are paramount in your organization.

Yours very truly,

WETMORE-SAVAGE A.E. COMPANY  
*R.P. Greene*  
PRESIDENT

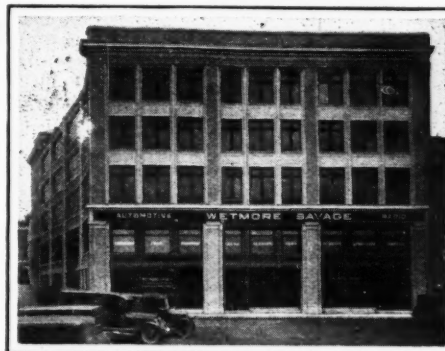
RPG:EH



R.P. GREENE  
President



E.W. LITTLEFIELD  
Vice Pres. & Sales Mgr.



## The Weidenhoff Line

- 1—TEST BENCHES, for Ignition, Starting and Lighting Units.
- 2—CONSTANT POTENTIAL charging equipment.
- 3—LATHES for armature work.
- 4—COMMUTATOR, Lathe and Mica undercutters.
- 5—ARMATURE TESTERS.
- 6—BEARING AND GEAR pullers.
- 7—BATTERY DISCHARGE sets.
- 8—CELL TESTERS.
- 9—MAGNETIZERS.
- 10—BENCH GRINDERS.

Ask your jobber for illustrated bulletins and terms—or write for bulletins and name of jobber near you.

# Weidenhoff

**Shop Equipment**  
for Battery and Electrical Service  
4358 Roosevelt Road, Chicago, Ill.

## COUPON—

For full particulars on Weidenhoff products, write the name of the product and your name and address on this coupon:

Name .....

Address .....

## Is Something for Nothing Always "Worth Just That"?

**I**T occasionally happens that the manufacturer of a product that is good, elects to introduce it by the distribution of free samples — or by the method of a free trial with returning privileges included.

This does not mean that the manufacturer is giving his product away, nor should the free feature belittle it in the minds of the trade.

The cost of free samples and free trials is legitimately charged to marketing expense — and should reflect the manufacturer's confidence in his product to satisfy, and make good.

**MOTOR AGE**

Chestnut and 56th Streets  
Philadelphia, Pa.



AFTER 1932 EVERY AUTOMOBILE MANUFACTURER CAN BUILD KNIGHT-ENGINED CARS

## A Record for a New Car

Seven hundred and fifty Falcon-Knight dealers report that they have never before sold an automobile that required so little service expense as the Falcon-Knight Six.

Relief from this item of expense is one factor which enables the Falcon-Knight dealer to conduct a profitable and satisfactory business.

FALCON MOTORS CORPORATION - DETROIT

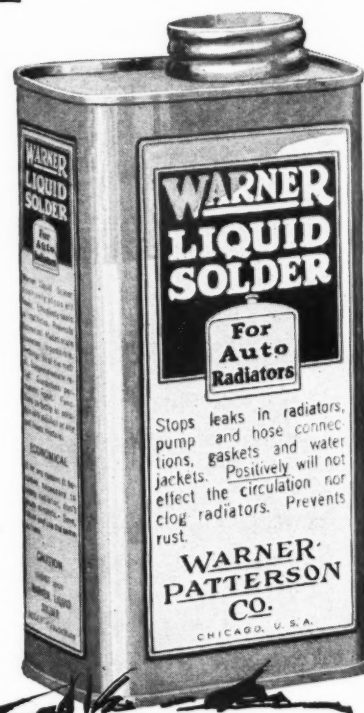
# Falcon-Knight



A M E R I C A ' S   F I N E S T   T Y P E   O F   M O T O R

# Many "Radiator Compounds" Come and Go, While **WARNER LIQUID SOLDER** Rises Higher in Public Demand

- Because—
1. It is a superior, proven product.
  2. It is the biggest advertised.
  3. It is guaranteed and endorsed by millions of users.



## WHY mince words?

You are in business to make money, nothing else but!

You can't laugh off this fact—that during the last ten years SEVERAL THOUSAND different brands of so called "radiator compounds" have been put on the market. Some were "local" brands made in kitchens. They had NO excuse for their existence except that their makers wanted to SELL them TO YOU.

ALL of those brands are in the discard today.

The only place you can get it is from your Jobber, who calls upon you regularly.

Despite the failure of those "direct-to-dealer-brands," and those "just-as-good-brands" and those "premium-brands" that you got stung with in the days past, still other new brands of the same character are being offered to you today. THEY TOO WILL have a short life.

Compare to that, the fact that Warner Liquid Solder has steadily INCREASED in sales. Today it is the LEADER.

## Why?

Because it is a superior product, scientifically made—It is guaranteed by a reputable maker—it is sold on a money back basis—millions of car owners endorse it—it enjoys public favor—it sells easier and in greater volume.

Because WE are the BIGGEST national advertisers of this kind of merchandise . . . and it is sold on a 100% Jobber Policy that protects you.

You don't want premiums but profits. WE CREATE buyers for you that give you TURN-OVER instead of LEFT OVERS.

It is impossible for a dealer to get hooked with Warner Liquid Solder.

It is a liquid asset on your shelves, as good as cash, because you can always get more out of it than you invested. It always has a market value.

ASK YOUR JOBBER'S SALESMAN FOR THE "SPECIAL" ON WARNER LIQUID SOLDER BEING OFFERED DURING SEPTEMBER. 100 PER CENT PROFIT FOR YOU

WARNER-PATTERSON COMPANY, 930 South Michigan Avenue, CHICAGO, ILLINOIS



and *Now*

# Cadillac and La Salle are standard equipped with Delco-Remy Lovejoy *Hydraulic* Shock Absorbers

Further proof of superiority is furnished in the selection of Lovejoy Hydraulic Shock Absorbers by Cadillac and LaSalle. They are standard equipment on all models.

This acceptance, following a similar action by Buick, Marmon and Reo, has already resulted in an enormous retail demand for Delco-Remy Lovejoy Hydraulic Shock Absorbers.

Authorized Lovejoy Distributors are being appointed everywhere. Through these Distributors, and through the Control Branches of United Motors, car dealers can obtain equipment for any model of any car.



## UNITED MOTORS SERVICE

GENERAL OFFICES, DETROIT, MICHIGAN

Official Service Organization for

DELCO-REMY, KLAXON HYATT, NEW DEPARTURE, HARRISON, JAXON, AC, LOVEJOY

Locations of Control Branches

ATLANTA  
BOSTON  
BUFFALO  
CHICAGO

CINCINNATI  
CLEVELAND  
DALLAS  
DENVER

DETROIT  
INDIANAPOLIS  
KANSAS CITY  
LOS ANGELES

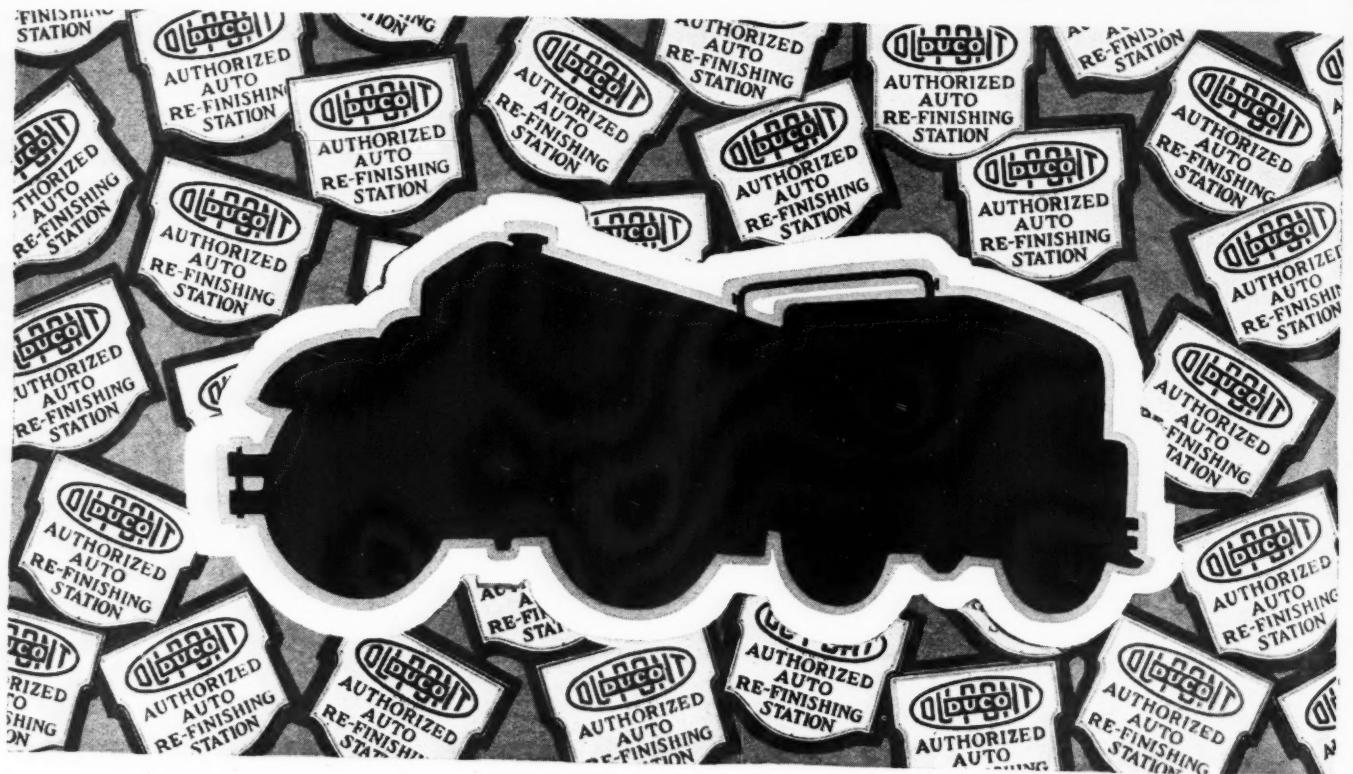
MILWAUKEE  
MINNEAPOLIS  
NEW ORLEANS  
NEW YORK

OMAHA  
PHILADELPHIA  
PITTSBURGH  
ST. LOUIS

SAN FRANCISCO  
SEATTLE  
TORONTO,  
CANADA



# 5000 DUCO RE-FINISHING STATIONS



BEHIND DEALERS SELLING  
DUPONT DUCO FINISHED CARS  
THERE IS A NATION-WIDE  
CHAIN OF 5000 DUCO  
REFINISHING STATIONS...

# DUCO

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# 7 Tube Set Single Dial Radio



## Metrodyne Radio Sets

Are Equipped  
For  
**BATTERY or  
ELECTRIC  
operation**

*The* **Metrodyne**  
ONLY ONE DIAL TO TUNE

RETAIL PRICE

**\$75<sup>00</sup>**

Completely Assembled  
Big Discounts to  
Agents and Dealers

Wonderful offer direct from the factory! The world's greatest radio! A perfect working, single dial control, 7 tube receiver! And just to prove our claims, we will ship it to your home for 30 days' free trial. Test it under all conditions. Test it for distance, volume and tonal quality—and if you are not convinced that it is the best single dial set you ever heard, return it to the factory. We don't want your money unless you are completely satisfied.

**Three Year Guarantee**

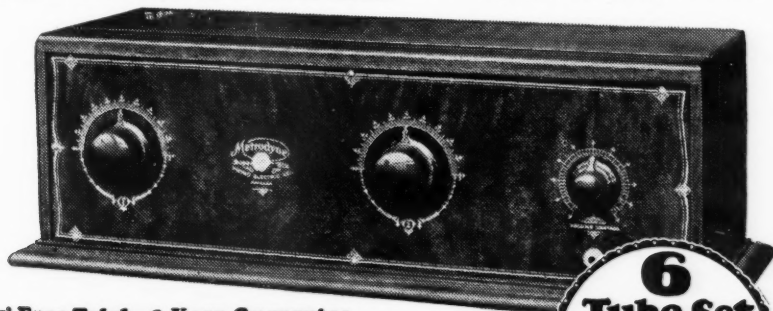
## BIG PROFITS TO AGENTS AND DEALERS

Our Agents and Dealers make big money selling Metrodyne Sets. You can work all or part time. Demonstrate the superiority of Metrodynes right in your home. Metrodyne Radios have no competition. Lowest wholesale prices. Demonstrating set on 30 days' free trial. Greatest money-making opportunity. Send coupon, a letter or a postal for our agent's proposition.

## Metrodyne Super-Seven Radio

A single dial control, 7 tube, tuned radio frequency set. **Tested and approved by Popular Science Institute of Standards, Popular Radio Laboratory, Radio News Laboratory and by America's leading Radio Engineers.** Designed and built by radio experts. Only the highest quality low loss parts are used. Magnificent, two-tone walnut cabinet with beautiful, gilt metal trimmings. Very newest 1928 model, embodying all the latest refinements.

Easiest set to operate. Only one small knob tunes in all stations. The dial is electrically lighted so that you can log stations in the dark. The volume control regulates the reception from a faint whisper to thunderous volume, **1,000 to 3,000 miles on loud speaker!** The Metrodyne Super-Seven is a beautiful and efficient receiver, and we are so sure that you will be delighted with it, that we make this liberal **30 days' free trial offer.** You to be the judge.



30 Days' Free Trial—3 Year Guarantee

## Metrodyne Super-Six

Another triumph in radio. Here's the new 1928 model Metrodyne 6 tube, two dial, long distance tuned radio frequency receiving set. Approved by leading radio engineers of America. Highest grade low loss parts, completely assembled in a beautiful walnut cabinet. Easy to operate. Dials easily logged. Tune in your favorite station on same dial readings every time—no guessing.

Mr. Howard, of Chicago, said: "While five Chicago broadcasting stations were on the air I tuned in seventeen out-of-town stations, including New York and San Francisco, on my loud speaker horn, very loud and clear, as though they were all in Chicago."

We are one of the pioneers of radio. The success of Metrodyne sets is due to our liberal 30 days' free trial offer, which gives you the opportunity of trying before buying. Thousands of Metrodynes have been bought on our liberal free trial basis.

**6  
Tube Set  
\$48<sup>50</sup>**  
RETAIL PRICE  
Completely  
Assembled

**MAIL THIS  
COUPON**  
or send a postal or letter. Get our  
proposition before buying a radio.  
Deal direct with manufacturer—  
**SAVE MONEY—WRITE NOW!**

## MAIL COUPON BELOW

Let us send you proof of Metrodyne quality—our  
30 days' free trial offer and 3 year guarantee

Mrs. Wm. Leffingwell, Westfield, N. J., writes: "The Metrodyne Radio I bought of you is a wow! This is as good as any \$225 machine I have ever seen."

N. M. Greene, Maywood, Ill., writes: "My time is up and the Metrodyne works fine. I got Havana, Cuba, Oakland, Calif., Denver, Colo., Toronto, Canada, all on the loud speaker."

J. W. Woods, Leadville, Colo., writes: "Received the 7-tube Metrodyne in fine condition. Had it up and working same day received. Was soon listening to Los Angeles, San Diego, Oakland and other California points; also St. Louis, Kansas City and other east and south stations—all coming in fine. Am more than pleased. Sure enjoying it."

We will send you hundreds of similar letters from owners who acclaim the Metrodyne as the greatest radio set in the world. A postal, letter or the coupon brings complete information, testimonials, wholesale prices, and our liberal **30 days' free trial offer.**

**METRO ELECTRIC COMPANY**  
2161-71 N. California Ave., Dept. 526  
Chicago, Illinois

Gentlemen:

Send me full particulars about Metrodyne 6 tube and 7 tube sets and your **30 days' free trial offer.**

Name \_\_\_\_\_

Address \_\_\_\_\_

If you are interested in AGENT'S proposition, place an "X" in the square ☐

**METRO ELECTRIC COMPANY**  
2161-71 N. California Ave. • Dept. 526 • Chicago, Illinois



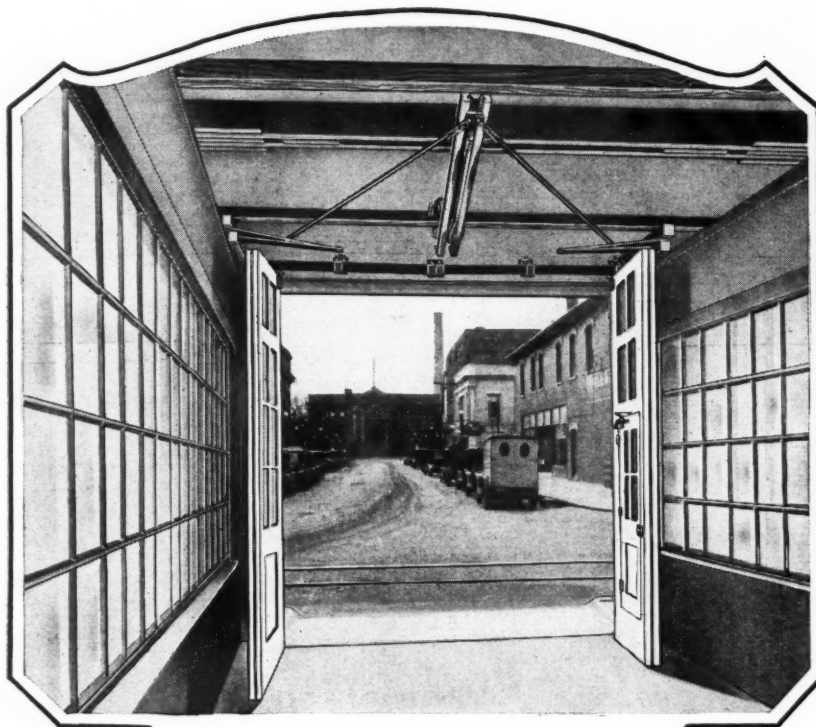


Illustration shows Aut-O-Dor as used with Richard-Wilcox 4-Door Slidetite Doors. Equally adaptable to double swinging doors.

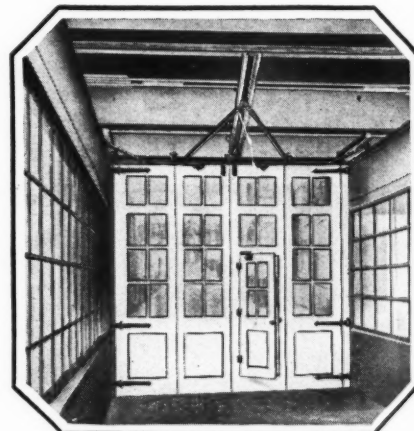
## Prepare for Winter with R. W. Aut-O-Dor ELECTRIC DOOR OPERATOR

You push a button, or pull a switch and the doors open and shut automatically. Push buttons can be located in several convenient parts of the garage.

The R-W Aut-O-Dor Electric Door Operator saves your time. It enables you to keep doors closed tight in cold weather without inconvenience—pays for itself in fuel saved. Besides—your patrons are never kept waiting. All these things mean money in your pocket.

Low first cost and practically no service or upkeep with the R-W Aut-O-Dor Electric Door Operator. It works by electricity, smoothly, gently, quietly and surely, without jolts or jars.

Write for further details



Doors in closed position—tight and storm proof. Note small wicket entrance door.

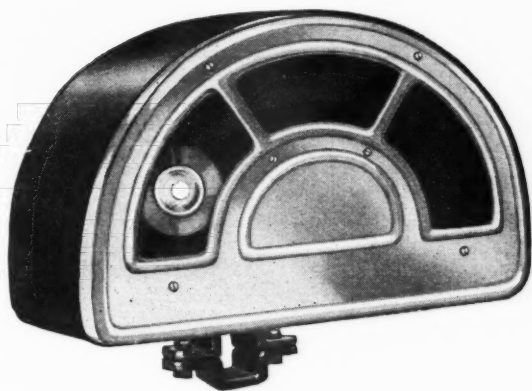
### Richards-Wilcox Mfg. Co.

"A Hanger for any Door that Slides."

New York • • • AURORA, ILLINOIS, U.S.A. • • • Chicago  
Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Des Moines  
Minneapolis Kansas City Los Angeles San Francisco Omaha Seattle Detroit  
Montreal • RICHARDS-WILCOX CANADIAN CO., LTD., LONDON, ONT. • Winnipeg



# A Safety Signal That Waves



## The *ilerlite*

*A stop-light that continues to wave back and forth as long as your foot is on the brake.*

**M**OTION attracts the eye—the Ilerlite has it. Day or night—in the country or on the city streets—in fog, rain, sleet, or snow—the Ilerlite is certain to be seen. Its brilliant waving red light is positive protection under all of these conditions.

The Ilerlite is operated by a simple electrical device which requires no oiling or adjusting. A German silver plated reflector concentrates the light into a beam and greatly multiplies its brilliance.



*A universal attachment bracket makes mounting on any car a simple task.*

### DEALERS

A market is open to the live dealers who avail themselves of the opportunity that the Ilerlite affords. Write direct for complete information on the Ilerlite, or ask your preferred jobber about it.

**The Iler Electrical Mfg. Co.**

5103 Lakeside Ave.

Cleveland, Ohio

## Your Copy of This Book



**IT'S FREE  
SEND FOR  
IT TODAY**

**B. C. AMES COMPANY**  
Waltham, Mass.

B. C. AMES CO.,  
Waltham, Mass.

Please send me your FREE Instruction Book—about testing and measuring cylinders.

Name .....

Address .....

M.A.-10

# Francisco Auto Heaters

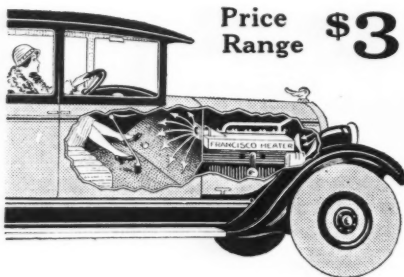
**One Line  
One Principle  
Double Satisfaction**

THERE need be no confusion about which heater to recommend to your customer for his car. The long famous patented FRANCISCO principle of *completely enclosing both manifolds*, makes the FRANCISCO the one standard auto heater that has been successfully adapted

**for ALL Makes of Cars**  
*Warms both the Motorist and the Motor*

As to the efficiency of FRANCISCO'S double utility—hot-spotting the Intake Manifold at the same time that it warms and ventilates the car body—what further assurance do you need than the fact that it has been endorsed as equipment by such automobile manufacturers as General Motors and the Packard Motor Company. No matter what car your customer drives, you may be absolutely certain that a FRANCISCO Heater will give him 100% satisfaction at a most modest price.

*Nationally Advertised in The  
SATURDAY EVENING POST*



Price Range **\$3 to \$10**

*Handled by the  
best automotive  
jobbers every-  
where. Canadian  
representation,  
Hamilton, Ont.*

The Francisco Auto Heater Co.  
Dept. 14, Columbus, Ohio

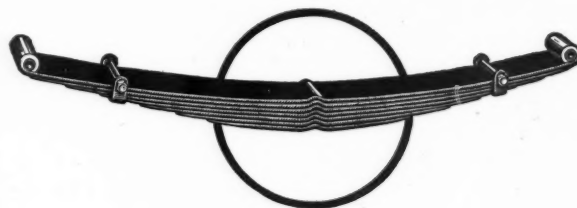
Send us full dealer information about FRAN-  
CISCO Auto Heaters

Name .....

Address .....

# TUTHILL TITANIC

ALLOY STEEL SPRINGS



**How Far Could  
You Walk With  
Fractured Knees?**

Not very far, of course. Then how can you expect an automobile spring to function properly when it is fractured with a center bolt hole or nib right where the greatest strain is concentrated? The center, where the axle rests, must be flexible, yet it must be the strongest part of the spring.

Tuthill Titanics are built just that way. Common sense decreed that the center be unblemished, so Titanics have just a gradual hump to keep the leaves aligned. No center bolt holes, no nibs—just a clean sweep of the finest alloy steel. And the result is the world's easiest riding spring with the world's greatest guarantee—that hump center is guaranteed *forever* against breakage.

Treat your customers to the best—be sure to specify "Titanics" next time your jobber's salesman calls.

When "price" is a factor in making a sale, remember that Tuthill "Equipment" Springs are of good quality and low in price.

**Tuthill Spring Co.**

760 Polk St., Dept. 1079, Chicago, Ill.

*Quality Spring Makers for Nearly Half a Century*

# Accurately Machined



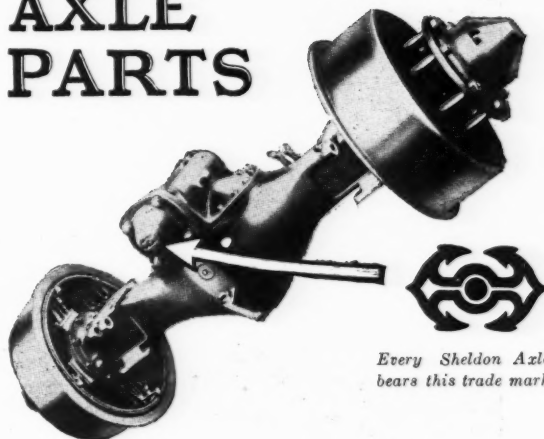
*We've been making Toledo Valves for over 13 years*

Whether you install a Cast Head Toledo Valve or an All-Steel Toledo Valve your customer is going to be satisfied. For the well-known Toledo quality is common to both. Simplify your operation—concentrate on the big, complete Toledo line.

**The Toledo Steel Products Company**  
TOLEDO, OHIO

**Use**  
**TOLEDO VALVES**

## GENUINE Sheldon AXLE PARTS



*Every Sheldon Axle bears this trade mark.*

### Truck Owners—Fleet Owners—Dealers

**Y**OU can now buy Genuine Sheldon Worm-Drive and Front Axle Parts more conveniently than ever before. Quicker Service for the 130 makes of trucks that during the last 13 years have been using sturdy Sheldon front and rear axles.

Order now from one of the following sources:

- |   |   |
|---|---|
| 1. Any truck manufacturer using Sheldon Axles.                        | Co. Box 263, Wilkes-Barre, Pa.  |
| 2. Any truck dealer.  | 4. The nearest authorized Sheldon Parts Distributor listed below:     |
| 3. Sheldon Axle Service   |   |
| Chadick Delamater Corp.,<br>623-629 West 23rd St.,<br>New York, N. Y. | Colyear Motor Sales Co.,<br>1228 South Hill St.,<br>Los Angeles, Cal. |
| Wisconsin Parts Co.,<br>2446 Prairie Ave.,<br>Chicago, Ill.           | Vancouver Parts Co.,<br>Vancouver, B. C.                              |

**NOTE—Excellent distributor territory still open. Write for our proposition on your letterhead.**



Identify the genuine Sheldon Axle by the double anchor at the rear end of the worm drive, and by the torpedo hub cap pictured here.

Sheldon Axles are built extra strong to stand abuse, but they give best service with occasional attention. Send for our booklet on the care and adjustment of Sheldon Axles. It's free!

Just fill in the coupon and mail it.

### SHELDON AXLE SERVICE CO.

P. O. Box 263, Wilkes-Barre, Pa.

Please send me your booklet on the care and adjustment of Sheldon front and rear axles, with sheet giving numbers and prices of genuine Sheldon Parts.

Name .....

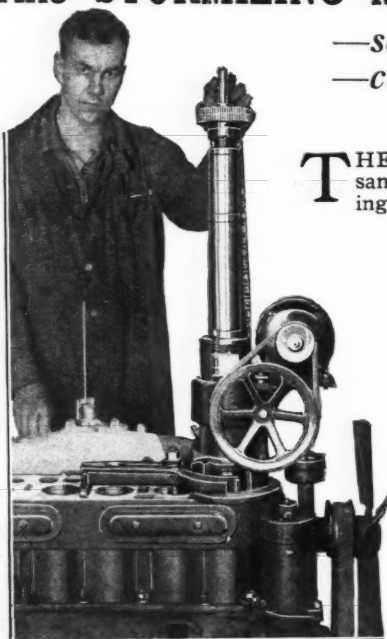
Street .....

City .....State.....



## This STORMIZING Machine makes ACCURACY CERTAIN!

—set cutter head at desired cylinder oversize  
—center and clamp—the rest is automatic, and highly profitable—



**T**HE STORMIZING process of renewing worn and scored cylinders is the same principle that practically all motor manufacturers use, first machining, then honing cylinders. 90% of all motors worn so that they need re-conditioning have one or more cylinders worn out of square. The STORM process corrects this alignment—squares up the cylinders—puts them in as good condition as the day they left the factory.

"Self-aligning tools" follow the worn walls—are not rigidly guided, and will not correct cylinders worn out of square. In contrast, the STORM machine has a boring bar that is rigidly guided by two heavy bearings fitted with *no* clearance. The STORM clamps on the unworn horizontal face of the block. When the cutter head on the end of the STORM boring bar mills down, it establishes a *new* bore that is round, free from taper, and **SQUARE WITH CRANK-SHAFT.**

STORMIZING pays extra profits because the operator can grind valves, straighten con-rods and fit pins in pistons while the STORM rebore automatically. Write today for "Stormizing as a Business and Process." It's a free booklet, full of profitable information.

STORM MANUFACTURING CO., INC.

406 (A) 6th Ave., South

Minneapolis, Minn.

# STORMIZING

**THE ACCURATE METHOD OF CYLINDER RENEWING**

*There are Profit Making Ideas  
in Every Issue of*

## MOTOR AGE

Many subscribers of MOTOR AGE, who realize the value of its contents each week, route every issue regularly through their places of business to all departments.

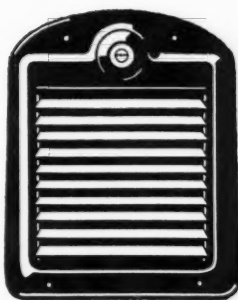
As a means of business-building this is a profitable habit to encourage, both for the benefit of the organization and its individual members. It is always best to read MOTOR AGE every week.

## MOTOR AGE

CHESTNUT and 56th STS.

PHILADELPHIA, PA.

You're going  
to have  
calls  
for



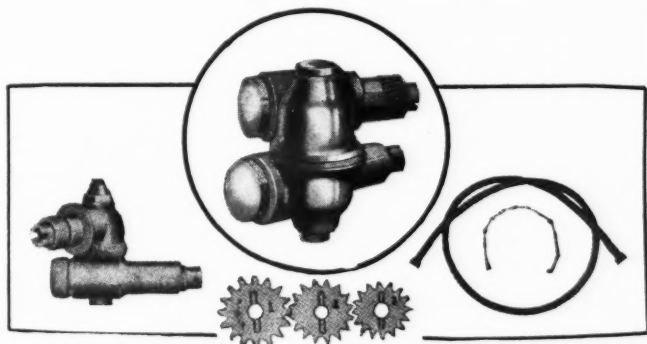
Pines Automatic  
**WINTERFRONT**  
from now on!

THE big Pines Winterfront national advertising campaign is under way. We're telling millions to come to your store and buy the *Only Automatic Radiator Shutter* on the market. If you haven't made arrangements to take advantage of this demand—*do it now!* Winterfront business hits like a bolt out of the sky. Be prepared.

**PINES WINTERFRONT**

*Distributors Everywhere*

**PINES WINTERFRONT COMPANY**  
422 North Sacramento Blvd., Chicago



**When You Want Speedometer Parts  
You Want Them!**

That's the time to write for A-O-K parts. Complete stocks maintained for immediate shipment on these 8 nationally known makes: Stewart, A.C., Johns-Manville, Corbin-Brown, Warner, Van Sicklin, Jones, Standard.

A-O-K parts are guaranteed to be accurate and to give extra long wear. Write for prices and trade discounts. Swivel Joint & Shaft Co., Plymouth, Indiana.

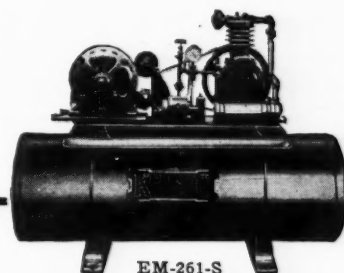


**A KELLOGG Compressor Suited  
to All Types of Service**

*Specifications:*

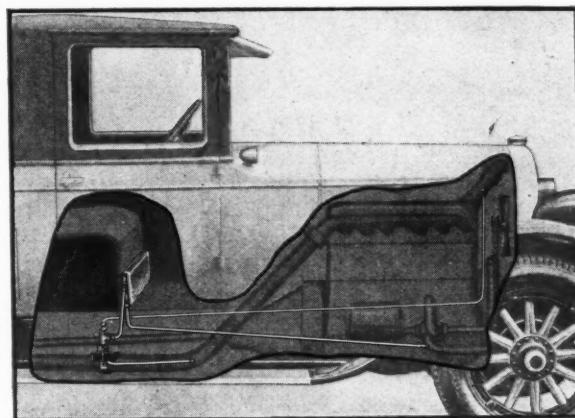
80 gallon tank  
8 cubic feet of air  
1½ horsepower motor  
Self-cleaning check  
valve  
Patented Kellogg  
pump and splash  
lubricating system  
Honed cylinders  
Air cleaner and  
muffler

The KELLOGG EM-261-S is a heavy duty, single stage compressor capable of supplying the big volume of air necessary for shop work—cleaning motors, spray painting, tire inflating, high pressure grease systems and all the other jobs for which air is used.



EM-261-S

**KELLOGG MFG. COMPANY**  
ROCHESTER, N. Y.



**Easily Installed!**

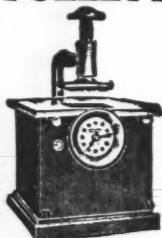
Drill 5 small holes, attach Super-Heater in exhaust pipe, connect hose and STEAM HEAT within 3 minutes after motor starts. Scientifically constructed, positive and efficient, the Jayenel Steam Heater is revolutionizing car heating. One model fits all cars. Ask your jobber.

**JUDD & LELAND MFG. CO.**  
Clifton Springs, N. Y.

**JAYENEL**  
*Steam*  
**HEATER**

## FOLLETT'S NEW MODEL TIME STAMP

accounts for every labor minute



Learn the interesting details from our descriptive data.

Prints the year, month, day, hour, minute, A.M. or P.M. at the exact moment the plunger is pressed—like this, for example:

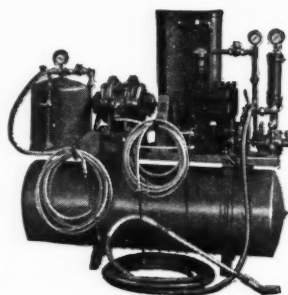
**NOV 19 1920 4 31 PM**

Tells when a job is started—and when it is finished. There can be no dispute over the time charge.

Absolutely automatic — except for winding. Every machine guaranteed.

Follett Time Recording Co., 217 High Street, Newark, N.J.  
"Established Since 1904"

## LIPMAN Spray Mist Car Washer



Cleans car thoroughly—quickly—inside and out, including motor, transmission, etc. Uses straight air on interior and for drying; spray mist—NOT HIGH WATER PRESSURE—on exterior; kerosene spray for grease encrusted parts. Absolutely guaranteed not to injure any car finish. Furnishes air for shop tools, tire service, stripping off old paint and applying new.

Complete details, prices, etc., gladly supplied on request.

LIPMAN PUMP WORKS  
2306 Eleventh St., Rockford, Ill.

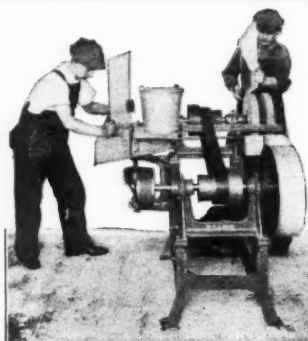
## SIMPLEX Piston Rings

enable the small garage to recondition worn motors perfectly without resizing cylinders and installing new pistons. Two Simplex rings to each cylinder positively stop oil pumping, piston slap and compression loss. Pressure lubrication, less friction, more power.

Send for the Simplex Method of reconditioning motors without cylinder machinery, and make more money.

The Simplex Piston Ring Co.  
of America, Inc.

1971 East 66th St., Cleveland, Ohio



## QUICK, EASY, PROFITABLE

A LARGE GLASS EDGER turns out auto glass repair work so quickly and so perfectly that any wide-awake shop can make money rapidly with one of our machines. They are not costly—do wonderful work and never wear out. Write for full information about them.

HENRY G. LANGE MACHINE WORKS  
166 North May St., Chicago



LAS-STIK has an important announcement to make to jobbers at the Automotive Equipment Association Exposition in Chicago, November 7th to 12th. It is a most important forward step in tube patch and plaster merchandising. It will be to your advantage to investigate. Drop in at the Las-Stik Exhibits.

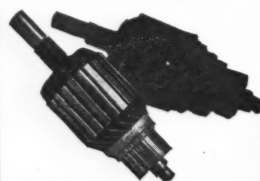
Las-Stik Patch Mfg. Co.  
Hamilton, Ohio

## THE G-H LINE

OF REPLACEMENT PARTS

Brake Springs, Clutch Plates, G-H Tension Rings, King Bolt Lock Pins, King Bolt Thrust Washers, Piston Pin Retaining Springs, Valve Lifter Assemblies, Valve Springs, Valve Stem Keys, Valves.

G-H MANUFACTURING COMPANY, Inc.  
6-8 East Mount Royal Ave., Baltimore, Md.



## FREDERICKS Rewinds

New low prices: Rewinding or exchanging any two unit type of automobile generator or starter armature, \$2.50. Any type of Ford armature \$1.50. Special prices on Ford armatures in quantities.

H. M. FREDERICKS CO., Look Haven, Pa.

There's always something new just at hand for the regular reader of

# MOTOR AGE



# Gilmer

Makers of  
the worlds  
best known  
fan belts.

L. H. GILMER & CO., Tacony, Philadelphia

THE Twin Three Principle and Full Floating Cone mechanism, exclusive features of the Hutto Grinder, make it possible to hold limits of one-half thousandth. The Full Floating Cone mechanism (the heart of the Hutto Grinder) compensates for uneven stone wear. The amount of stock removed governs the amount of stone wear. For example: A tapered cylinder would wear the stones more rapidly on the bottom than on the top. The Hutto Full Floating Cone mechanism takes care of this.

Hutto Engineering Company, Inc.  
519 Lyncaste Avenue Detroit, Michigan

## CELORON TIMING GEARS

NON-METALLIC; ELIMINATE NOISE AND WEAR  
OF METAL-TO-METAL CONTACTS

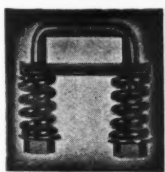
THE CELORON COMPANY, Bridgeport, Pa.  
Division of Diamond State Fibre Co.

## VESTA BATTERIES

VESTA BATTERY CORPORATION 2100 Indiana Ave., Chicago, U. S. A.  
Central Distributors in 65 Leading Centers

# HALL HONE

\$39.75 at your Jobber's  
Spring and Solid Pressure in one Hone



Pat. Pending

## Orrville Spring Governors

Make Smooth-Running Profits

Among the foremost popular sellers for easier riding. Simple in operation and easy to install. Check the rebound and control the springs against "galloping". Ask for illustrated literature and discounts worth while.

ORRVILLE SPRING GOVERNOR CO., INC.  
500 Brant Bldg. Canton, Ohio



U. S.

Canada

THOMSON MFG. CO.  
Dept. 21 Peoria, Ill.

If jobber does not stock  
write direct

Genuine  
APEX Innerings

Guaranteed to stop oil pumping  
and piston slap and renew motors  
without re-boring.

## LYCOMING Motors

Fine Fours, Sixes and Eights-in-Line

LYCOMING MANUFACTURING COMPANY, Williamsport, Pa.

Years Ahead in Automobile Motor Efficiency

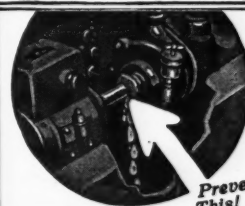


FREE

SWAP a postage stamp for  
thousands of dollars worth of  
real facts on Car Washing. Send  
for your free copy of the hand  
book.

MANLEY MFG. CO.  
York, Pa., U. S. A.

## TIMKEN Tapered ROLLER BEARINGS



It's a Permanent Repair!

Have a can of CONNEAUT PLASTIC METALLIC PACKING in your garage and be ready for the fellow who says he can't keep his water-pump from leaking. All sizes in one can. Stocked with your Jobber.

1 lb. can .....\$1.75 per lb.  
5 lb. can .....1.60 per lb.

Manufactured by  
THE CONNEAUT PACKING COMPANY  
Conneaut Ohio

They don't buy if they go by -  
*Air Scales* stop them and bring  
them back

The Air Scale Company  
Toledo, Ohio, U. S. A.

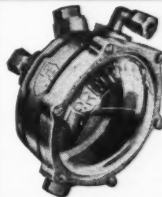
## BELLEVUE

Trunks, Trunk Carriers, Pumps, Bumpers, Jacks

See our combination trunk, trunk carrier, spare tire carrier and bumperette. COMPLETE line for all cars. Write for prices and nearest jobber.

THE BELLEVUE MFG. CO.

Bellevue, Ohio



**PROTEX-A-MOTOR**  
GASOLINE PURIFIER  
JUNIOR MODEL

Fits Ford, Dodge, Chevrolet, Chrysler, Erskine, Essex, Flint, Falcon-Knight, Maxwell, Oakland, Oldsmobile, Overland, Pontiac, Star, Whippet. Standard Model, \$5.00. PROTEX-A-MOTOR MFG. CO., Pittston, Pa.

\$350

FOR SALE: Authorized AUTOMOTIVE ELECTRICAL SERVICE STATION centrally located, and second largest in city of 350,000, established wholesale and retail trade, service floor 65 x 35 ft. DRIVE IN from main traffic street, DRIVE OUT on a non-traffic street between two main arteries. Will invoice around \$15,000, reasons for selling, other business. Wonderful opportunity. Address Box 6309, MOTOR AGE.

WANTED: Manufacturer with strong Sales Organization to market newly invented money maker and time saving garage tool, on royalty basis. Inventor E. J. Wellens, 580 Geary St., San Francisco, Calif.

## CLASSIFIED

DISTRIBUTORS AND SALESMEN WANTED. Established manufacturing corporation is opening new territory for sale of World's latest and greatest efficient safety Auto-headlight control device. A necessity. Wonderful opportunity. Prospects unlimited. State managers should earn \$15,000. District salesmen \$5,000 to \$10,000 annually. Requires \$2,500 to \$5,000 cash to handle sales. Gauntt Shift-O-Lites Co., Fort Wayne, Ind.

## C. L. PARKER

Ex-Examiner U. S. Patent Office

Attorney-at-Law and Solicitor of Patents

McGill Building, Washington, D. C.

Patent, Trade Mark and Copyright Law

# The New AMES Magnetic Gauge Mount



**for  
Bearing  
Tests**

**The only means  
of Testing  
Motor Bearings  
without  
taking down**

**Shows the exact  
amount of wear  
in wristpins and  
connecting rod  
bearings—Speedy  
and Accurate**

**One of the 22 import-  
ant uses of this valu-  
able tool—fully de-  
scribed and illustrated  
in the Manual of Tests  
FREE  
Send for it To-day.**

**B. C. Ames Co.  
Waltham, Mass.**

B. C. AMES CO.  
Waltham, Mass.

Please send me the new book—  
"FACTORY TESTS IN THE REPAIR SHOP"

Name .....

Address .....

MA 10 .....

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## Slangy Sam

(The Kunkel Man)



Says: "It fills the  
till because  
it kills the chill"

The Kunkel Heater delivers all the heat the car owner wants. Clean heat—free from any taint of exhaust gas.

\* \* \*

And this good heater will please you because it is easy to install. (No kidding or exaggerating about that word "easy.") A green apprentice can do the installing—quickly.

\* \* \*

No holes to drill in metal. No bending, twisting, cutting, or other struggles with the exhaust pipe.

\* \* \*

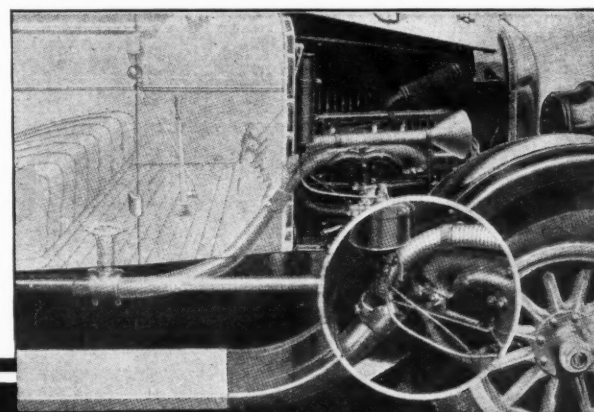
And the price is so low anybody can afford to own this best of Hot Air Heaters. Write right now for all the facts.

*Eastern Factory*

**COLEMAN MFG. COMPANY**  
Quincy Ave. Cleveland, Ohio

*Western Factory*

**KUNKEL MANUFACTURING CO.**  
Hart Michigan



# KUNKEL HEATER

*The original Fresh air HEATER*

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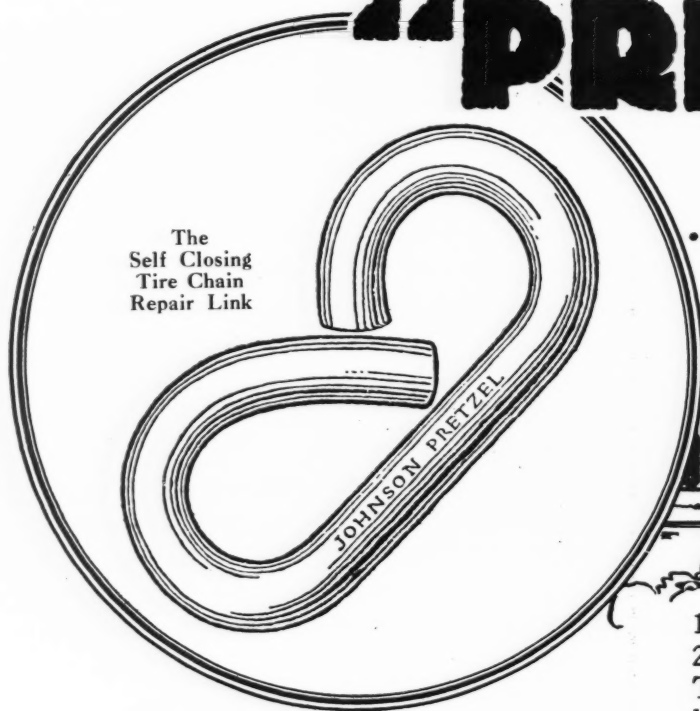
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# More than a carload of "PRETZELS"

*...in single orders*



The  
Self Closing  
Tire Chain  
Repair Link



1,000,000 Pretzels—more than a carload—  
24 tons in single orders, for one shipment.  
That is the way Pretzels are being ordered  
by some of the larger jobbers.

Orders received since August 1st already exceed  
last year's entire "Pretzel" business



"Pretzels" are packed in  
handsome Counter Display  
Cartons

They actually sell themselves. Their  
value is so obvious and the clever  
display tells the whole story so that  
no real sales effort is necessary to  
sell Pretzels. They afford you a real  
opportunity to add profits without  
increasing overhead.

*Order Pretzels Today!*

DEALERS and jobbers are now preparing for real  
business on "Pretzels." Their last year's sales  
demonstrated that there is an immense market for  
these handy tire chain repair links and their enthusi-  
astic reception promises remarkable sales this season.

"Pretzels" render a service that every motorist appre-  
ciates. When a tire chain breaks it takes only a  
moment to hook the ends together with a "Pretzel"  
and drive ahead. *No tools needed.* The weight of  
the car closes it. And it becomes a permanent link—  
a part of the chain.

"Pretzels" sell like the proverbial "hot-cakes." And  
your profit is larger than is usual on accessories.

Don't miss out on this profit maker. Send to your  
*Jobber* today for samples and prepare for early  
business.



# Johnson

MOTOR PRODUCTS CO.

1401 Carroll Ave.  
Chicago, Ill.



## ONE CHANGE IN TWENTY YEARS

Even changes in styles reflect constant improvements. The first real brake lining improvement in twenty years—

**GRAFILD BRAKE LINING**  
*New and Different Construction*

## HOLDS WET or DRY

Graphite and asbestos, felted—spun into a yarn of unusual strength, uniform in texture and size—we're bound.

Less foot pressure, safe, steady braking at all times.

## NOWADAYS

More traffic means more brake repairs. Adopt "Service Testing". Learn how a hundred dollars make a thousand.

WORLD BESTOS

# GRAFILD

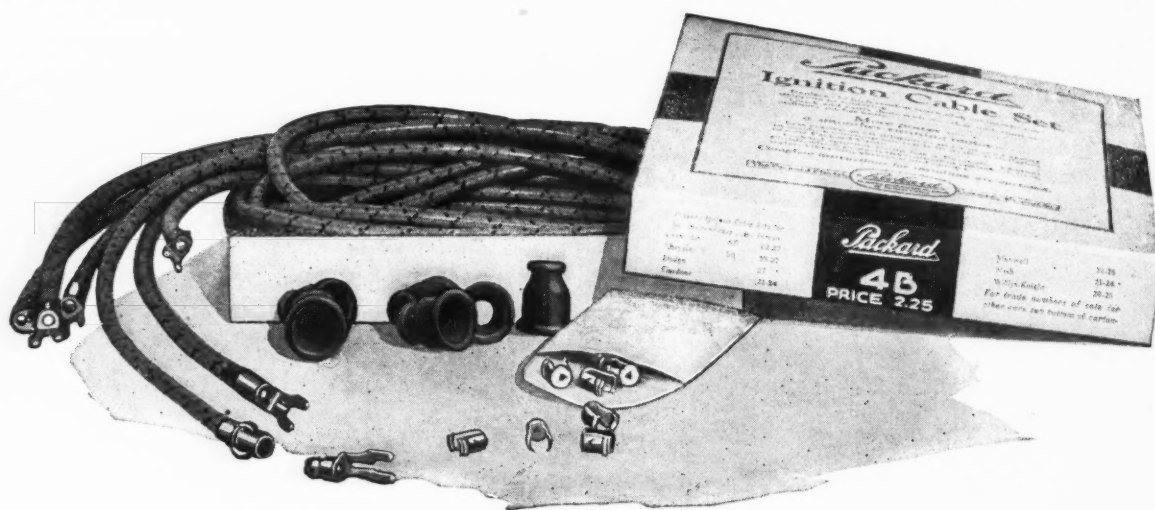
BRAKE LINING

*"Holds Wet or Dry"*

World Bestos Corporation

52 Courtland Street, Paterson, N. J.

# Ignition Cable Sets—Complete



**Inexpensive... Simple  
... Easy to Install**

Tests made on average cars in service, by Prof. H. M. Jacklin at Ohio State University, have proved conclusively that an increase in power and a saving in gas, amounting to between 10% and 60% resulted from replacing old spark plug cable with a new Packard Ignition Cable Set.



A helper can install a Packard Ignition Cable Set in a few minutes.

**P**ACKARD has done it again. The need for a quick method of replacing spark plug cables has brought a complete ignition cable set to the automotive market.

These attractive shelf packages contain everything necessary to make the installation—pyroxylin lacquered cable, cut to length, with universal spark plug terminals attached—clip terminals for distributor ends—and rubber protectors.

Sets can be easily and quickly installed with no other tools than an ordinary pocket knife.

This is a new source of profit for the live dealer. Ask your Packard jobber or write direct for complete information.

The Packard Electric

*Packard*

Company Warren, Ohio

is never seen, except on goods  
of honest value



